soils LIMITED

Ground Investigation Report

at
6 Wimblehurst Road, Wimblehurst Hotel,
Horsham, West Sussex RH12 4ED

for
Ecotecture

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Prepared by
A Campbell MSci CGeol RoGEP
(ac@soilslimited.co.uk)

First check by
Nikos Sidiropoulos BSc MSc CEng MIMMM RoGEP

Second check by
Eur Ing R B Higginson BSc, PGDip, CEng, MICE, FGS

This is not a valid document for use in the design of the project unless it is titled Final in the document status box.

Current regulations and good practice were used in the preparation of this report. The recommendations given in this report must be reviewed by an appropriately qualified person at the time of preparation of the scheme design to ensure that any recommendations given remain valid in light of changes in regulation and practice, or additional information obtained regarding the site.

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Commission

This document comprises the Ground Investigation Report (GIR) and incorporates the results, discussion, and conclusions to this intrusive works. General site data is recorded below:

Commission Record	
Client	Ecotecture
Site Name	Wimblehurst Hotel, 6 Wimblehurst Road, Horsham, RH12 4ED
Grid Reference	TQ 17392 31704
Soils Limited Quotation Ref	Q31412.1, dated 22nd July 2026.
Job Order Form	Q31412.1 23/07/2026

The record of revision to this document is presented below:

Record Of Revisions		
Revision	**Date**	**Reason**
1.0	18/09/2026	Original to the Client

Note(s): The latest revised document supersedes all previous revisions of the GIR produced by Soils Limited.

Documents associated with this development that must be referred to are given below.

Record Of Associated Documents			
Reference	**Type**	**Date**	**Creator**
.866/301B	Proposed Site Plan	Jul 26	Ecotecture Ecological Architecture
866/351A	Proposed Tree Root Protection Area		
866/100A	Existing Location and Block Plan		
25064-02-T-E	Existing Topographical Survey	Nov 2025	HB Surveys Ltd

Note(s):

Limitations and Disclaimers

The report was prepared solely for the brief described in our quotation and Section 1.1 of this report. We disclaim any responsibility to the Client and others in respect of any matters outside the scope of our engagement.

We have exercised all reasonable skill, care and diligence within the terms of the Contract with the Client, incorporation of our General Conditions of Contract of Business and taking into account the resources devoted to us by agreement with the Client.

This report is a snapshot of the site and conditions taken only at the time of our investigation works and described in our reporting. The ground is a product of continuing natural and artificial processes, and has variation by depth and location that cannot be determined absolutely. While a ground investigation will aim to understand and mitigate, risk cannot be eliminated.

Current regulations and good practice were used in the preparation of this report. Consideration of any subsequent changes to regulations or practice that may have occurred following issue of this report is the responsibility of the user.

If the term “competent person” is used in this report or any Soils Limited document, it means an engineering geologist or civil engineer with a minimum of three years post graduate experience in the understanding and application of the appropriate codes of practice.

Unless the site investigation works have been designed and specified in accordance with EC7, this report is not a Ground Investigation Report as defined by Eurocode 7.

Any reference to ground level relates to the site level at the time of the investigation, unless otherwise stated. Ground elevations and coordinates are only provided when this forms part of our engagement.

A survey of the possible presence or absence of invasive species including Japanese Knotweed is outside the scope of this investigation.

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Section 1 Introduction

1.1 Objective of Investigation

The Client commissioned Soils Limited to undertake an intrusive ground investigation and to prepare an interpretative Ground Investigation Report to supply the Client and their designers with information regarding ground conditions, to assist in preparing a foundation scheme for a basement development that was appropriate to the settings present on the site.

The investigation was made by means of in-situ testing and geotechnical laboratory testing undertaken on soil samples taken from the exploratory holes.

Soil samples were to be taken for geotechnical laboratory testing to enable recommendations for the safe redevelopment of the site in order to provide information to inform construction of the extension of Wimblehurst Hotel, 6 Wimblehurst Road, Horsham, RH12 4ED.

1.2 Sit Description

Th site comprises Wimblehurst H tel ith gr vel car par ing re to the n rth and west with semi m tur and mature trees approx mately 5 – 0m way to the north along Wimblehurst Road Wimbleh rst Hotel as a Victorian i la co prisin a three store uild ng within 1 acre of rounds. Acc ss was n t p ovided to check any c llars or b low gro nd tructures withi the hotel t rou hout s te works. To he south, out east and southwe t, t e si e comprised n open are o flat arden surrounde by matu e ree . Border ng the site to the west was shtonle gh Resident al Care Hom and urr unding Wimb ehurst Hot l re esidential pr pe tie to th east nd nor h. To t e south, Ash on Grange n rsing home features o Ri hmond R ad

Topograph ca ly, the site as n ele ation of approximate y 5 m Abov Ord a ce Datum mA D) and is fl t w th a gradient of <1% extending f r approxim tely 0m fro north est to southe st, w ich is he extent of Wi blehu st H tel and i s gr unds. (Go gle ar h Pro 2026).

The s te loc tion plan is giv n in Fig re . An erial photo raph of the s te and i s close envir ns has been i cl ded in F gure 2.

1.3 Propo ed De elop ent

It s proposed that Wim lehu st Hot l will have an extens on w thin t e back o th prope ty.

In compiling this r po t relianc w s placed o the document listed in the ecord Of Associ ted ocumen s. he r commendatio s rovided it in his re ort are ade ex lus vely in el tion to th sc eme o tlined above, nd must not be appli d to any o her sche e wit out fur her on ultation with oil Limit d. Soils Lim ted ust be not fied abou any change or deviation from the scheme outlined.

Development plans provided by the Client are presented in Appendix E.

1.4 Anticipated Geology

The 1:50,000 British Geological Survey (BGS) map showed the site to be located directly upon the bedrock Upper Tunbridge Wells Sand - Sandstone and mudstone without overlying superficial deposits.

1.4.1 Upper Tunbridge Wells Sand (UTW)

The Upper Tunbridge Wells Sand consists of variegated soft mudstones, silts, thinly bedded sandstones and occasional clay ironstones. The clay bands usually weather to red and the silts to mottled grey and orange.

Section 2 Site Works

2.1 Proposed Project Works

The proposed intrusive investigation was designed to provide information on the ground conditions and to aid the design of foundations for the proposed basement. The intended investigation, as outlined within the Soils Limited quotation (Q31412.1, dated 22nd July 2026), was to comprise the following items:

- 3No. windowless sampler and dynamic probe locations to 5 and 6m below ground level (bgl) respectively
- 1No. borehole to a target depth of 15m bgl with SPT testing at 1.5m intervals in unconsolidated strata
- 2No. groundwater monitoring wells to 5m bgl in windowless sampler borehole locations with 2No. dynamic probes.
- 2No. infiltration tests within trial pits with testing depths to be limited to maximum reach of a 1.5-ton excavator. Expected to be 1.6 to 1.8m depth.
- 3No. rounds of monthly groundwater monitoring.

2.1.1 Actual Project Works

The actual project works were undertaken between 3rd to 6th August 2026, with subsequent sample logging, laboratory testing, monitoring, and reporting. The actual works comprised:

- 5No. windowless sampler boreholes to a depth of between 1.1 and 5m bgl.
- 4No. dynamic probe holes to a depth between 1.0 and 3.8m bgl.
- 2No. machine excavated trial pits to a depth of between 0.8 and 1.15m bgl each with infiltration testing.
- 1No. hand excavated trial pit to 1.15m that was extended by 1 of the 5No. windowless sampler borehole locations (WS5).
- 1No. cable percussive borehole to 8.50m bgl with SPT testing at 1.5m intervals.

All exploratory holes were scanned with a Cable Avoidance Tool (CAT) and Genny prior to excavation to ensure the health and safety of the operatives.

Shallow termination depths between WS1 and WS3 and DP1 to DP3 inclusive occurred due to encountering sandstone bedrock preventing the windowless sampler rig progressing to the original 5m proposed scheduled depth

Due to the bedrock being encountered at shallow depths within the originally proposed scope and the adoption of windowless sampler boreholes WS1 to WS3 inclusive only achieving a maximum of 2.6m bgl, two additional windowless sampler boreholes were completed (WS4 and WS5) to 5m bgl with one accompanying dynamic probe hole, DP5.

Two machine excavated trial pits terminated at a shallower depth compared to previously expected (1.6 – 1.8m bgl) due to sandstone bedrock encountered between 0.8 – 1.15m

bgl, excavating through bedrock was beyond the capability of the 1.5T excavator. Consequently, a further hand excavated trial pit was attempted (TPSK3) which achieved a depth of 1.15m bgl. TPSK3 subsequently had with 3 testing cycle. Soakage tests completed within it before becoming extended by windowless sampler borehole WS5 to 5m bgl.

The cable percussive borehole terminated at a shallower depth of 8.50m due to encountering siltstone and sandstone between 6.00 – 8.50m bgl bedrock within the Upper Tunbridge Wells Sand. In addition, in situ SPT testing recording 50 blow partial tests without any SPT sample recovery and the hole could not be drilled beyond a depth of 8.50m as a result.

Two windowless sampler boreholes (WS4 and WS5) were backfilled with gravel and bentonite following the installation of monitoring wells, boreholes WS1 to WS3, TPSK1 and TPSK2 were backfilled with arisings.

All exploratory hole locations specified by the Client together with additional locations chosen when shallow bedrock was encountered have been presented in

Figure 3.

Following completion of site works, soil cores were logged and subsampled so that samples could be sent to the laboratory for geotechnical testing.

2.2 Ground Conditions

On 3rd to 6th August 2026 five windowless sampler boreholes (WS1 – WS5) were drilled, using an Archway Competitor, to depths ranging between 1.10 and 5.00m bgl at locations selected by the Client using a development plan provided by the Client. Standpipes were installed within boreholes WS4 and WS5 to allow for groundwater monitoring.
In each exploratory hole ground conditions comprised a thin capping of Topsoil to an average depth of about 0.5m bgl or underlain by Made Ground extending to a maximum established depth of 1.20m bgl. This was underlain by the Upper Tunbridge Wells Sand that changed from clays to a maximum proven depth of 5.00m bgl in WS4 and WS5 with uncemented sand, sandstone and siltstone to the maximum depth of 8.50m bgl in BH1.

The maximum depths of the exploratory holes, all of which terminated in the Upper Tunbridge Wells Sand have been included in Table 2.1.

Table 2.1 Final Depth of Exploratory Holes

Exploratory Hole	Depth (m bgl)	Exploratory Hole	Depth (m bgl)
BH1	8.50	WS2	1.15
TPSK1	0.80	WS3	2.60
TPSK2	1.15	WS4[W]	5.00
TPSK3	1.15	WS5[W]	5.00
WS1	1.10		

Note(s): [W] - well installation. The depths given taken from the ground level adjacent to each exploratory hole the time of investigation.

The soil conditions encountered were recorded and soil sampling commensurate with the purposes of the investigation was carried out. The depths given on the exploratory hole logs and quoted in this report were measured from ground level.

The soils encountered from immediately below ground surface have been described in the following manner. Where the soil incorporated an organic content such as either decomposing leaf litter or roots or has been identified as part of the in-situ weathering profile, it has been described as Topsoil both on the logs and within this report. Where man has clearly either placed the soil, or the composition altered, with say greater than an estimated 5% of a non-natural constituent, it has been referred to as Made Ground both on the log and within this report.

For more complete information about the soils encountered within the general area of the site reference must be made to the detailed records given within Appendix B, but for the purposes of discussion, the succession of conditions encountered in the exploratory holes in descending order can be summarised as:

Made Ground/Topsoil (MG/TS)
Upper Tunbridge Wells Sand (UTW)

The ground conditions encountered in the exploratory holes are summarised in Table 2.2.

Table 2.2 Ground Conditions

Strata	Depth Encountered (m bgl)		Typical Thickness (m)	Typical Description
	Top	Bottom		
TS	0.0	0.30 - 0.50	0.50	Dark brown slightly gravelly silty fine to medium SAND. Gravel is subrounded medium to coarse ironstone and flint. Abundant rootlets
MG		0.60 – 1.20	0.60-1.20	Dark brown mottled brown silty gravelly fine SAND. Gravel is angular to subrounded fine to coarse of brick, ceramic, and flint
UTW	0.30 – 1.15	0.80 – 8.50[1,2]	2.50 –7.30	Light yellowish brown silty gravelly fine SAND. SANDSTONE recovered as brown mottled orange gravel of sandstone. Firm to stiff becoming very stiff yellowish brown mottled light grey silty sandy CLAY with rare subangular medium sandstone. Stiff to very stiff CLAY with bands of sandstone and siltstone (BH1).

Note(s): [1] Final depth of exploratory hole. [2] Base of strata not encountered. The depths given were taken from the ground level adjacent to each exploratory hole at the time of investigation.

2.3 Ground Conditions Encountered in Exploratory Holes

The ground conditions encountered in exploratory holes have been described below in descending order. The engineering logs are presented in Appendix B.1.

2.3.1 Made Ground and Topsoil

Soils described as Made Ground were encountered in five out of the eight exploratory holes from ground level to depths ranging between 0.60 and 1.20m bgl (TPSK3/WS5).

The Made Ground typically comprised dark brown mottled brown silty gravelly fine SAND. Gravel is angular to subrounded fine to coarse of brick, ceramic, and flint.

Soils described as Topsoil were encountered in three exploratory holes (WS1 – WS3)

from ground level to a depth of between 0.30m - 0.50m bgl.

The Topsoil comprised dark brown slightly gravelly silty fine to medium sand. Gravel is subrounded medium to coarse ironstone and flint with abundant rootlets.

The established depth of Made Ground and Topsoil found at each exploratory hole location have been included in Table 2.3.

Table 2.3 Established Depth of Made Ground/Topsoil

Exploratory Hole	Strata	Depth (m bgl)	Exploratory Hole	Strata	Depth (m bgl)
BH1	MG	1.20	WS3	TS	0.50
TPSK1	MG	0.60	WS4[W]	MG	0.60
TPSK2	MG	0.60	TPSK3/WS5[W]	MG	1.15
WS1	TS	0.40			
WS2	TS	0.30			

Note(s): The depths given taken from the ground level adjacent to each exploratory hole the time of investigation.

2.3.2 Upper Tunbridge Wells Sand

Upper Tunbridge Wells Sand (UTW) comprises granular and cohesive strata. Borehole logs describe UTW as light yellowish brown silty clayey fine SAND / Firm to stiff yellowish brown mottled light grey silty sandy CLAY with rare subangular medium sandstone.

The established depth of Upper Tunbridge Wells Sand found at each exploratory hole location have been included in Table 2.4.

Table 2.4 Established Depth of Upper Tunbridge Wells Sand

Exploratory Hole	Depth (m bgl)	Exploratory Hole	Depth (m bgl)
WS1	1.10[I] [g]	BH1	8.50[I] [c]>1.20 [g]>8.50
WS2	1.15[I][g]	TPSK1	0.80[I] [g]
WS3	2.60[I][g]>1.40,[c]>2.40[g]>2.6	TPSK2	1.15[I][g]
WS4[W]	5.00[I][g]>1.20,[c].5.00	TPSK3 / WS5[W]	5.00[I] [c]>5.00

Note(s): [I] Final depth of exploratory hole. The depths given were taken from the ground level adjacent to each exploratory hole at the time of investigation.. [g]=granular, [c]=cohesive,

Dynamic Probes were also completed to depths shown in Table 2.6.

Table 2.6 Dynamic Probe depth achieved

Exploratory Hole	Depth (m bgl)	Exploratory Hole	Depth (m bgl)
DP1	1.0	DP3	2.8
DP2	3.8	DP5	3.8

Note(s): No locations achieved 5m bgl due to terminating on sandstone bedrock within the UTW at shallower depths.The depths given taken from the ground level adjacent to each exploratory hole the time of investigation.

2.4 Roots / Impact on trees

Roots were encountered in five out of the eight exploratory holes at depths ranging between 0.80 and 2.40m bgl, as detailed in Table 2.. Semi mature and mature trees were located within approximately 5 -10m from exploratory hole locations TPSK1, TPSK2, WS3, WS4 and WS5/TPSK3.

Table 2.7 Established Depth of Root Penetration

Exploratory Hole	Depth (m bgl)	Exploratory Hole	Depth (m bgl)
WS1	1.00	WS5/TPSK3	0.90
WS2	0.90	BH1	0.50
WS3	2.40	TPSK1	0.80
WS4	1.00	TPSK2	0.90

Note(s): The depths given taken from the ground level adjacent to each exploratory hole the time of investigation.

Roots were recorded on windowless sampler logs, based on observations from the soil cores. Windowless sampling can identify the presence of roots at depth but provides localised information only.

Root condition (e.g. live, desiccated or decayed) was assessed visually at the time of logging by the geotechnical engineer. This assessment is indicative and definitive confirmation of root viability and its impact on any potential basement construction can only be achieved through specialist arboricultural assessment.

2.5 Groundwater

Groundwater was not encountered in any of the exploratory hole locations whilst drilling though borehole installations were constructed separately upon completion of drilling works within each of WS4 and WS5 to allow port-works groundwater monitoring on 3No occasions as agreed with the Client.

Changes in groundwater level occur for reasons including seasonal effects and variations in drainage. The investigation and first round of groundwater monitoring was conducted in August 2026, when groundwater levels should be approaching from their annual minimum (lowest) elevation, which typically occurs around September whilst the annual maximum (highest) typically occurs around March.

Groundwater monitoring was conducted within the standpipe(s) following completion of site works and has been presented in Table 2.8.

Table 2.8 Groundwater Monitoring

Exploratory Hole	Well Depth (m bgl)	Dates		
		21/08/26	Sept	Oct
WS4	5.00	3.39		
WS5	5.00	3.46		

Groundwater monitoring was ongoing at the time of reporting and the report will be updated when monitoring is complete.

Section 3 Geotechnical In-Situ and Laboratory Testing

3.1 Standard Penetration Tests

Standard Penetration Tests (SPTs) were undertaken in BH1. The results were interpreted based on the classifications outlined in Appendix C.1, Table C.1.1 to Table C.1.3.

Table 3.1 SPT Hammer Efficiency

SPT Hammer Ref	Energy Ratio Er (%)
110RP76	67
Note(s):	

Table 3.2 Standard Penetration Tests (SPT) Interpretation

Strata	Depth Range (m bgl)	N60 Range	Soil Classification
UTW[C]	1.20 – 8.50	12 - 59	Very Stiff (Cu=60 > 295kPa)

Note(s): [] extrapolated from seating blows. The depths given taken from the ground level adjacent to each exploratory hole the time of investigation.

A full interpretation of the SPT results, are outlined in Appendix C.2, Table C.2.1.

3.2 Dynamic Probe Tests

The results were converted to equivalent SPT “N60” values based on dynamic energy using commercial computer software (Geostru). Interpretation interpreted based on the classifications outlined in Appendix C.1,Table C.1.1 to Table C.1.3.

Table 3.3 Hammer Efficiency

Rig Reference	Energy Ratio Er (%)
Premier 1 110 -60	73.49

Table 3.4 Inferred SPT Interpretation

Strata	Depth Range (m bgl)	Inferred N60 Range	Soil Classification
UTW[c))	1.15 – 2.60	27 - 195	High to Very High (C_u = 135 – 300kPa)
UTW[g]	0.30 – 3.80	16 - 195	Medium Dense to Very Dense

Note(s): SPT “N60” values presented have been corrected in accordance with BS EN 22476 Part 3.
[c] cohesive [g] granular

A full interpretation of the DPSH tests, are outlined in Appendix C.2, Table C.2.2.

3.3 Infiltration Tests

Infiltration testing was undertaken in TPSK1, TPSK2 and TPSK3 within the MG and UTW following the principles of BRE Digest 365 Soakaway design: 2016. Testing completed within TPSK1 and TPSK2 were not in alignment with the principles of BRE365 successful due to the volume of water not draining away by 75%. TPSK3 at the same location of WS5 achieved infiltration rates between 6.9 x 10^{-4} m/s and 6.7 x 10^{-6} m/s in alignment with the guidelines.

Table 3.5 Infiltration Rates

Exploratory Hole	Test No.	Test Depth (m bgl)	Infiltration Rate (m/s)	Comment
TPSK1	1	0.15 – 0.46	Not determinable	Insufficient head loss
TPSK2	1	0.28 – 0.47	Not determinable	
TPSK3/WS5	1	0.70 – 1.05	6.7 x 10^{-6}	Within MG
	2	0.20 – 1.01	6.9 x 10^{-4}	
	3	0.63 – 1.05	6.0 x 10^{-6}	

Note(s):

3.4 Atterberg Limit Tests

Atterberg Limit tests were performed on three samples, from the cohesive Upper Tunbridge Wells Sand (UTW). The results were classified in accordance with BRE Digest 240 and NHBC Standards Chapter 4.2.

Table 3.6 Atterberg Limit Results Classification

Strata	Depth (m bgl)	Volume Change Potential	
		NHBC	BRE 240
UTW	1.85 – 4.00	Low to Medium	Low to Medium

Details are given in Table C.2., Appendix C.2 and the laboratory report in Appendix C.3.

3.5 Particle Size Distribution Tests

Particle Size Distribution (PSD) tests were performed on six samples from the Upper Tunbridge Wells Sand.

Table 3.7 Particle Size Distribution Classification

Strata	Depth (m bgl)	Volume Change Potential	
		NHBC	BRE 240
UTW	0.70 – 4.00	Yes	Yes

Note that a cohesive soil is only classified as having a volume change potential if it is also plastic and an Atterberg Limit test can be conducted on the strata.

A full interpretation of the PSD tests, are outlined in Table C.2.3, Appendix C.2 and the laboratory report in Appendix C.3.

3.6 Sulphate and pH Tests

Water soluble sulphate (2:1) and pH testing was undertaken four samples in accordance with Building Research Establishment Special Digest 1, 2005, 'Concrete in Aggressive Ground'.

Table 3.8 Sulphate and pH Test Results

Strata	Depth (m bgl)	Sulphate Concentration (mg/l)	Sulphur (%)	pH
MG	0.50 – 1.00	21 - 68	0.03	7.1 – 8.1
UTW	1.50 – 5.50	23 - 93	0.03 – 0.08	5.2 – 7.7

The significance of the sulphate and pH Test results are discussed in Section 5.2 and the laboratory report in Appendix C.3.

Section 4 Engineering Appraisal

4.1 Established Ground Conditions

An engineering appraisal of the soil types encountered during the site investigation and likely to be encountered during the redevelopment of this site is presented. Soil descriptions are based on analysis of disturbed samples taken from the exploratory holes.

4.1.1 Made Ground and Topsoil

Foundations must not be placed on non-engineered fill unless such use can be justified on the basis of a thorough ground investigation and detailed design. Foundations must be taken through any Topsoil and/or Made Ground and either into, or onto a suitable underlying natural stratum of adequate bearing characteristics.

Soils described as Made Ground were encountered five out of the eight exploratory holes from ground level to depths ranging between 0.0 and 1.20m bgl (WS5/TPSK3). Topsoil was encountered between 0.30 – 0.50m bgl.

4.1.2 Upper Tunbridge Wells Sand

Soils described as Upper Tunbridge Wells Sand were encountered underlying the Made Ground from 0.40m to 1.20m bgl and persisted to depths between of 0.80m and 8.50m bgl.

4.1.3 Guidance on Shrinkable Soils

The ground conditions were established comprising bedrock of Upper Tunbridge Wells Sand.

The volume change potential for each strata was established and presented in Table 4.1.

Table 4.1 Established Volume Change Potential by Strata

Strata	Volume Change Potential		Established Lower Boundary (m bgl)
	BRE	NHBC	
UTW[(c)]	Medium	Medium	4.00

Foundations constructed within the cohesive soils of the Upper Tunbridge Wells Sand must be designed to the medium volume change potential.

4.1.4 Groundwater Flow

The minimum groundwater depth recorded to date was in the well installed in WS4 in August and was standing at 3.39m bgl. It must be noted that the summer of 2026 experienced negligible rainfall and very high temperatures. Consequently, groundwater levels are likely to rise during the winter months and may be significantly shallower (nearer the ground surface.

Section 5 Foundation Scheme

5.1 Foundation Recommendations

Foundations **must not** be constructed within any Made Ground/Topsoil due to the likely variability and potential for large load induced settlements both total and differential.

Roots were encountered in all of eight exploratory holes at depths ranging between 0.50m bgl and 2.40m bgl. If roots are encountered during the construction phase foundations **must not be placed within any live root penetrated** or desiccated **cohesive soils or those with a volume change potential**. Should the foundation excavations reveal such materials, the excavations **must** be extended to greater depth in order to bypass these unsuitable soils. Excavations must be checked by a suitable person prior to concrete being poured.

5.1.1 Shallow Foundations within Upper Tunbridge Wells Sand

Based on a 5.00 by 0.75m strip foundation, using commercial software Table 5.1 shows the calculated bearing values and anticipated settlement characteristics. The maximum encountered depth of Made Ground/Topsoil was 1.15m bgl, bearing capacities were calculated below this depth.

Table 5.1 Allowable Bearing Capacities in the Upper Tunbridge Wells Sand

Depth (m bgl)	Size (m)	Bearing Capacity (kPa)	Anticipated Settlement (mm)
1.20	5.00 x 0.75	120	<25
1.20		140	24
2.00		180	24

Note(s):

All foundation formations must be examined, recorded, and signed off by a competent person.

Care must be exercised where foundations pass over soils of different engineering properties or different soil types to minimise the potential effects of differential settlements.

For the allowable bearing value given above, settlements should not exceed the presented values, provided that excavation bases are carefully bottomed out and blinded or concreted as soon after excavation as possible and kept dry.

Foundations must not be constructed over former structures and other hard spots. The foundations design must be suitable for the conditions present at the site.

The anticipated settlement includes both elastic settlement and long-term drained settlement (in the case of cohesive soils).

Anticipated settlements may be taken as proportional to the bearing capacity adopted

(for the same configuration of foundation), therefore if the bearing value is halved the anticipated settlement will halve.

All loose material and Made Ground must be removed from the base of the excavations. Failure to do so could results in increased settlements.

5.1.2 Basement and Stability Requirements

This report does not comprise a basement impact assessment (BIA) and no calculations of the impact of the proposed works on the surrounding ground and/or structures was requested by the Client. The following comments are of a very general non-specific nature. Should lateral and vertical ground movements and the damage category resulting works be required this can be undertaken by Soils Limited.

The excavation of the proposed basement was estimated at 3.00-3.50m bgl. Groundwater was encountered during monitoring of WS4 and WS5 in August 2026 that showed groundwater levels of 3.39m and 3.46m bgl respectively. It must be noted that the summer of 2026 experienced negligible rainfall and very high temperatures.

Groundwater levels could rise, particularly after prolonged periods of wet weather.

If the construction works take place during the winter months or during/after prolonged periods of wet weather perched water could accumulate or groundwater could be found migrating through the cohesive and granular deposits of the Upper Tunbridge Wells Sand. If any water ingress is not prevented by dewatering, the basement slab could become “buoyant” whilst empty. This must be taken into account in the design. Support of excavation and dewatering with pumps from sumps introduced into the floor of the excavation must be considered.

In the absence of robust long-term groundwater monitoring data from the well installed, full hydrostatic pressure (worst credible case) must be taken into account for the design of the proposed basement slab/walls or the worst credible levels as defined by EC – 7.

5.1.3 Stability Issues

The excavation of the basement must not affect the integrity of any adjacent structures or land beyond the site boundaries. Where there is a sufficient distance between the site boundary and the basement excavation, support may be permitted using a wide strip foundation to form an earth retaining structure. In other cases, the most suitable form of construction should be within a coffer dam structure using a sheet piles, secant or contiguous concrete piled wall around the periphery of the structure.

Generally cantilevered piled walls have an open face to embedded ratio of about one to two ie. a supported face 3.50m in height would require a penetration into the ground, below the base of the excavation, of about 7.00m. Should the piled wall be purely an unsupported cantilever then it is likely that quite deep section sheet piles or large diameter bored piles would be required. Installing a braced waling to the wall could reduce the sheet section, or diameter of the piles.

5.2 Subsurface Concrete

The sulphate and pH tests carried out in accordance with BRE Special Digest 1, 2005, 'Concrete in Aggressive Ground', established the site concrete classifications for each stratum as presented in Table 5.1.

Table 5.1 Concrete Classification

Stratum	Design Sulphate Class	ACEC Class
MG	DS-1	AC-1
UTW	DS-1	AC-1

Concrete to be placed in contact with soil or groundwater must be designed in accordance with the recommendations of Building Research Establishment Special Digest 1 2005, *'Concrete in Aggressive Ground'* taking into account any possible exposure of potentially pyrite bearing natural ground and the pH of the soils.

5.3 Excavations

Shallow excavations in the Made Ground/Topsoil and Upper Tunbridge Wells Sand are likely to be marginally stable in the short term at best.

Deeper excavations taken into any granular Upper Tunbridge Wells Sand are likely to be unstable and require support. Unsupported earth faces formed during excavation may be liable to collapse without warning and suitable safety precautions must therefore be taken to ensure that such earth faces are adequately supported or battered back to a safe angle of repose. Cohesive Upper Tunbridge Wells Sand will likely be stable unsupported if founded within stiff to very stiff clay as encountered in WS4 and WS5 up to 5.00m bgl within the back garden and up to 4.00m bgl at BH1 near the entrance of site. Sandstone and siltstone rock was encountered at BH1 from 6 – 8.5m bgl at greater; if excavations progress to this depth a breaker is likely to be required to advance it. Excavations beneath the groundwater table are likely to be unstable and dewatering of foundation trenches may be necessary.

Section 6 Site Drainage

6.1 Soakaways

The results of in-situ infiltration tests gave soil infiltration rates of between 6.9 x 10-4 m/s and 6.7 x 10-6 m/s. These indicate the Upper Tunbridge Wells Sand to be of poor drainage characteristics (TPSK3) and negligible at two other locations (TPSK1 and TPSK2)

It is recommended that the results of the in-situ permeability testing are passed to a drainage engineer for commentary and design.

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Appendix C.1 Classification
Appendix C.2 Interpretation
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Appendix D Chemical Laboratory Analyses
Appendix D.1 Chemical Laboratory Results
Appendix E Information Provided by the Client

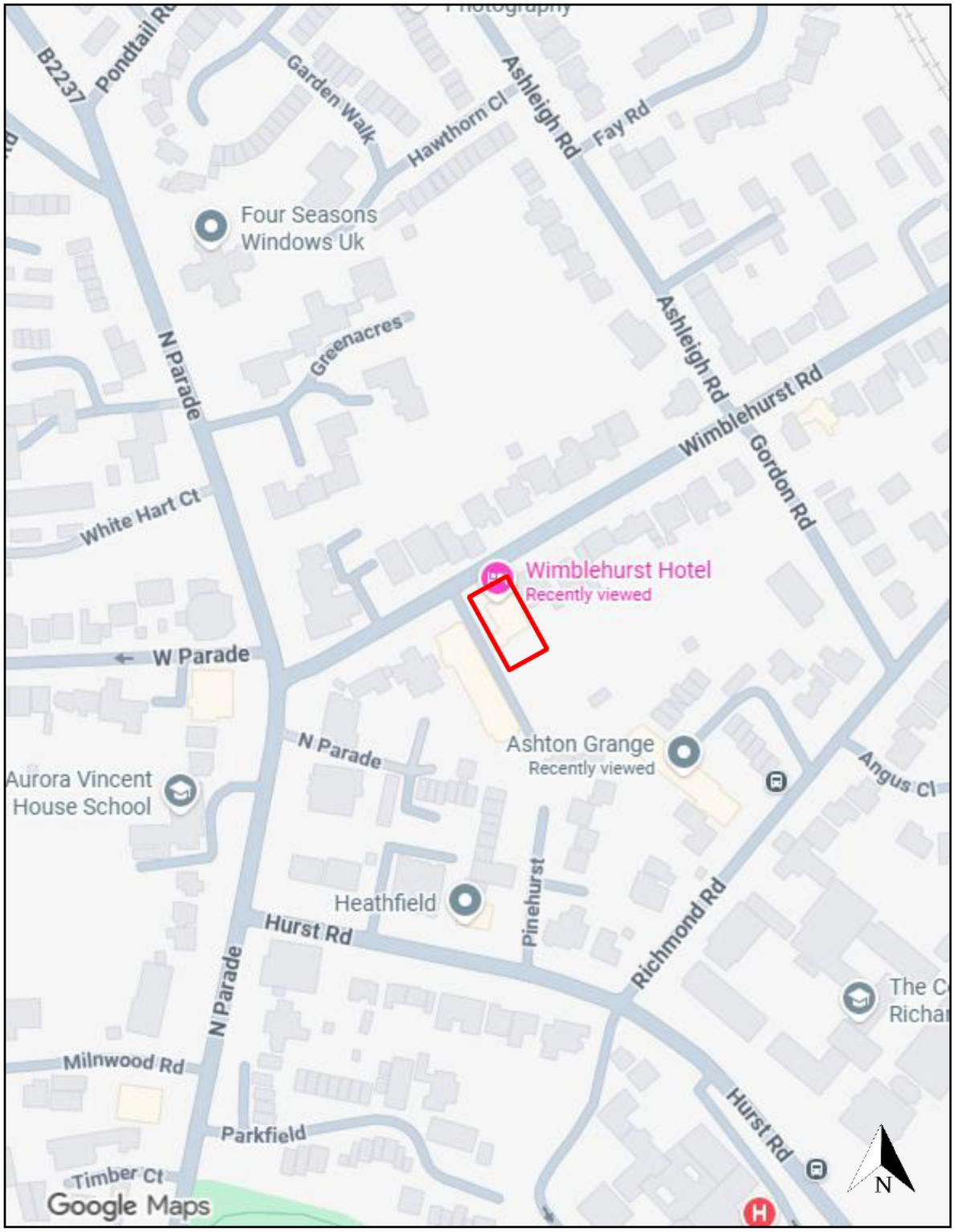


Figure 1 – Site Location Map

Job Number 22521	**Project** Wimblehurst Hotel, Horsham
Client Ecotecture	**Date** September 2026



Figure 2 – Aerial Photograph



Figure 3 – Exploratory Hole Plan

Job Number 22521	**Project** Wimblehurst Hotel, Horsham
Client Ecotecture	**Date** September 2026

Appendix A Standards and Resources

The site works, soil descriptions and testing were undertaken in accordance with the following standards where applicable:

- BS 5930:2015+A1:2020 and BS EN ISO 22476-2:2005+A1:2011
- BS 5930:2015+A1:2020 and BS EN ISO 22476-2&3:2005+A1:2011
- BS 5930:2015+A1:2020 and BS EN ISO 22476-3:2005+A1:2011
- BS EN 1997-1:2004+A1:2013 Eurocode 7. Geotechnical design
- BS EN ISO 14688-1:2018 - Geotechnical investigation and testing - Identification and description
- BS EN ISO 14688-2:2018 - Geotechnical investigation and testing - Principles for a classification
- BS 8004:2015 – Code of practice for foundations
- BS 1377:1990 Parts 1 to 8
- BRE Digest 241 “Low-rise buildings on shrinkable clay soils: Part 2
- BRE Special Digest 1, 2005, ‘Concrete in Aggressive Ground’
- Stroud, M. A. 1974, “The Standard Penetration Test – its application and interpretation”, Proc. ICE Conf. on Penetration Testing in the UK, Birmingham. Thomas Telford, London.
- N.E. Simons, B.K. Menzies, “A Short Course in Foundation Engineering”
- NHBC Standards Chapter 4.2, January 2024.
- Google Earth
- British Geological Survey Website

Appendix B Field Work

Appendix B.1 Engineers Logs

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Key to exploratory hole symbols and abbreviations

SAMPLE TYPES

ACM - Asbestos sample
AMAL - Amalgamated sample
B - Bulk disturbed sample
BLK - Block sample
C - Core sample
CBR - CBR test sample
D - Disturbed sample
ES - Environmental sample
EW - Environmental water sample
G - Gas sample
J - Jar sample
L - Liner sample
TW - Pushed thin wall sample
U - Undisturbed sample
UT - Undisturbed thin wall sample
W - Water sample
T - Tub sample
JT - Jar and Tub sample

IN-SITU TESTS

HV - Hand shear vane
HV(r) - Hand shear vane residual
PID - Photo ionisation detector
PP - Hand penetrometer
SPT - Standard penetration test
SPT(C) - SPT using cone

GROUNDWATER

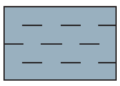
Groundwater strike
Groundwater rest level

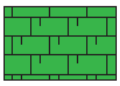
ROTARY CORE DETAILS

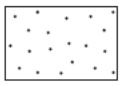
TCR - Total core recovery (%)
SCR - Solid core recovery (%)
RQD - Rock quality designation (%)
FI - Fracture index
NI - Non-intact core
AZCL - Assumed zone of core loss

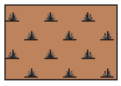
LEGEND

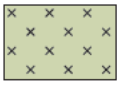

Topsoil


Clay

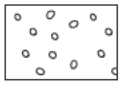

Chalk

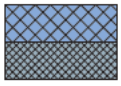

Sand backfill

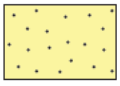

Peat

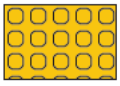

Silt

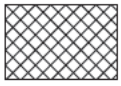

Breccia


Gravel backfill

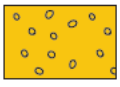

Made ground [cohesive]

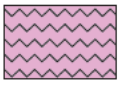

Sand

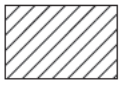

Conglomerate

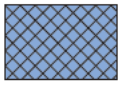

Arisings

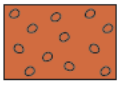

Concrete

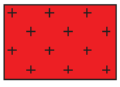

Gravel

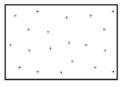

Metamorphic

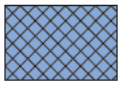

Bentonite

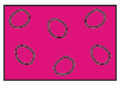

Wood


Cobbles


Igneous

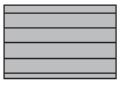

Concrete


Brick


Boulders

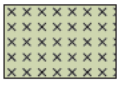

Grout


Bituminous material

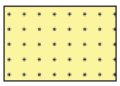

Mudstone


Plain pipe

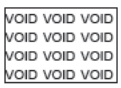

Gypsum


Siltstone

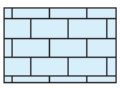

Coal


Sandstone


Slotted pipe



Void


Limestone

Created using Pebble Geo

soils LIMITED

Window Sampler

WS1

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
WS			1.10	1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521	2026-08-05	2026-08-05

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
		0.20	D			(0.40)		Dark brown slightly gravelly silty fine to medium SAND. Gravel is subrounded medium to coarse ironstone and flint. Abundant rootlets. [Topsoil]
		0.50	D		0.70	0.40		
		0.70	D		0.50	(0.20) 0.60		Greyish brown and yellowish brown mottled silty fine to medium SAND. Rare subangular fine to medium gravel of flint. Frequent rootlets. [Upper Tunbridge Wells Sand]
		1.00	D		0.00	(0.50) 1.10		SANDSTONE. Recovered as grey and orange mottled very sandy subangular fine to coarse GRAVEL of sandstone. [Upper Tunbridge Wells Sand]
								End of Borehole at 1.10m

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0

Remarks
Live and decayed rootlets observed to 1.00m bgl.

Method, Plant, Stability, Dimensions
0.00 - 1.10m

Logger
TA

Checked By: AC **Approved By:** AC **Status:** FINAL

soils LIMITED

Window Sampler

WS2

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
WS			1.15	1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521	2026-08-05	2026-08-05

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
		0.10	D			(0.30)		Dark brown slightly gravelly silty fine to medium SAND. Gravel is subrounded medium to coarse ironstone and flint. Abundant rootlets. [Topsoil]
		0.40	D		0.85	0.30		
		0.80	D			(0.60)		Yellowish brown, orange, and light brownish grey mottled silty very gravelly fine to medium SAND. Gravel is subangular to subrounded fine to coarse sandstone. Frequent rootlets. [Upper Tunbridge Wells Sand]
		1.05	D		0.25	0.90		
						(0.25)		Grey and orangish brown mottled silty gravelly fine to medium SAND. Gravel is subrounded to rounded fine to coarse sandstone. [Upper Tunbridge Wells Sand]
					0.00	1.15		*End of Borehole at 1.15m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0

Remarks
Live and decayed rootlets observed to 0.90m bgl.

Method, Plant, Stability, Dimensions
0.00 - 1.15m

Logger
TA

Checked By: AC **Approved By:** AC **Status:** FINAL

soils LIMITED

Window Sampler

WS3

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
WS				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521	2026-08-05	2026-08-05

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
		0.30	D			(0.50) 0.50		Dark brown slightly gravelly silty fine to medium SAND. Gravel is subrounded medium to coarse ironstone and flint. Abundant rootlets. [Topsoil]
		0.60	D			(0.25) 0.75		SANDSTONE. Recovered as yellowish brown, greyish brown and light brown mottled sandy gravelly subangular to subrounded COBBLES of sandstone. Gravel is subangular to subrounded fine to coarse sandstone. Occasional rootlets. [Upper Tunbridge Wells Sand]
		0.85	D			(0.25) 1.00		
		1.10	D			(0.40) 1.40		SANDSTONE. Recovered as light brown mottled orange sandy subrounded fine to coarse GRAVEL of sandstone. Occassional rootlets. [Upper Tunbridge Wells Sand]
		1.50	D			(0.35) 1.75		SILTSTONE. Recovered as silty sandy subangular fine to coarse GRAVEL of sandy siltstone. Sand is fine. [Upper Tunbridge Wells Sand]
		1.85	D			(0.65) 2.40		Brown mottled light grey and black slightly gravelly sandy bioturbated SILT. Sand is fine to medium. Gravel is rounded fine to coarse siltstone and sandstone. [Upper Tunbridge Wells Sand]
		2.10	D			(0.20) 2.60		Stiff brown and light grey mottled slightly sandy silty CLAY. [Upper Tunbridge Wells Sand]
		2.50	D					SANDSTONE. Recovered as brown and yellowish brown mottled silty sandy subangular fine to coarse GRAVEL of sandstone. [Upper Tunbridge Wells Sand]
								End of Borehole at 2.60m

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0

Remarks
Live and decayed rootlets observed to 2.40m bgl.

Method, Plant, Stability, Dimensions
0.00 - 2.60m

Logger
TA

Checked By: AC **Approved By:** AC **Status:** FINAL

soils LIMITED

Window Sampler

WS4

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
WS				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521	2026-08-05	2026-08-05

Client
Ecotecture

Consultant
Soils Limited

Contractor
Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
						(0.10) 0.10		Dense sandy angular fine to coarse GRAVEL of brick, concrete, ceramic, asphalt and flint. [Made Ground]
		0.25	D			(0.20) 0.30		
		0.50	D			(0.30) 0.60		Dark brown mottled brown silty gravelly fine SAND. Gravel is angular to subrounded fine to coarse of brick, ceramic, and flint. [Made Ground]
		0.75	D					
		1.00	D			(0.60) 1.20		Brown clayey silty SAND. Rare angular to subrounded fine to medium brick and flint. Rare rootlets. [Made Ground]
		2.00	D					Dense orange, grey, and light brown mottled slightly gravelly silty SAND. Gravel is subrounded to rounded fine to medium sandstone. Rare rootlets. [Upper Tunbridge Wells Sand]
		3.00	D			(2.40) 3.60		Firm to stiff yellowish brown mottled light grey silty sandy CLAY with rare subangular medium sandstone. [Upper Tunbridge Wells Sand] *Hard sandstone layer. (2.50 - 2.70m)*
		4.00	D			(1.40) 5.00		Stiff to very stiff light grey mottled grey slightly sandy SILT with rare siltstone. Sand is fine. [Upper Tunbridge Wells Sand]
		5.00	D					*End of Borehole at 5.00m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0

Remarks
Live and decayed rootlets observed to 1.00m bgl.

Method, Plant, Stability, Dimensions

Logger

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

soils LIMITED

Window Sampler

WS5

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
WS				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521	2026-08-05	2026-08-05

Client
Ecotecture

Consultant
Soils Limited

Contractor
Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
						(1.15)		Yellowish brown gravelly fine SAND. Gravel is angular to subangular fine to coarse of brick, rare metal and sandstone. [Made Ground]
						1.15		Firm to stiff yellowish brown mottled brown SILT with rare subrounded to rounded fine to medium gravel of sandstone. [Upper Tunbridge Wells Sand]
		2.00	D					
						(2.85)		
		3.00	D					
		4.00	D			4.00		Stiff to very stiff greyish brown slightly sandy SILT with rare siltstone. Sand is fine. [Upper Tunbridge Wells Sand]
						(1.00)		
		5.00	D			5.00		*End of Borehole at 5.00m*

Remarks
No rootlets observed.

Method, Plant, Stability, Dimensions

Logger

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

Borehole Log

BH1
Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
BH				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521	2026-08-05	2026-08-05

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
						(0.08) 0.08		Grey angular coarse GRAVEL of asphalt and flint [Made Ground]
						(0.12) 0.20		
						(0.50) 0.70		Brown gravelly fine to coarse SAND / fill with angular coarse gravel of asphalt and flint. [Made Ground]
						(0.50) 1.20		Brown and dark brown mottled sandy silty CLAY with occasional angular to subrounded fine to medium gravel of brick and flint. Sand is fine to coarse. Rare rootlets. [Made Ground]
		1.50	SPT	N=19 (5,4/5,5,5,4)				Dense light brown mottled orange silty gravelly fine to medium SAND with layers of sandstone. Gravel is subrounded medium to coarse of sandstone. [Upper Tunbridge Wells Sand]
						(2.80)		Firm to stiff yellowish brown sandy CLAY. [Upper Tunbridge Wells Sand]
		3.00	SPT	N=53 for 300mm (11,19/16,13,13,11)				
						4.00		Stiff to very stiff grey and brown mottled sandy SILT. Sand is fine to medium. [Upper Tunbridge Wells Sand]
		4.50	SPT	N=50 for 150mm (6,12/42,8 for 75mm)				
		6.00	SPT	N=50 for 75mm (25 for 75mm)		(4.50)		*Hard sandstone and siltstone (6.00 - 8.50m)*
		7.50	SPT	N=50 for 50mm (25 for 50mm)				
		8.50	SPT	N=50 for 10mm (25 for 10mm)		8.50		*End of Borehole at 8.50m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0

Remarks
Decayed rootlets observed to 0.50m bgl.

Method, Plant, Stability, Dimensions

Logger

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

Dynamic Probe

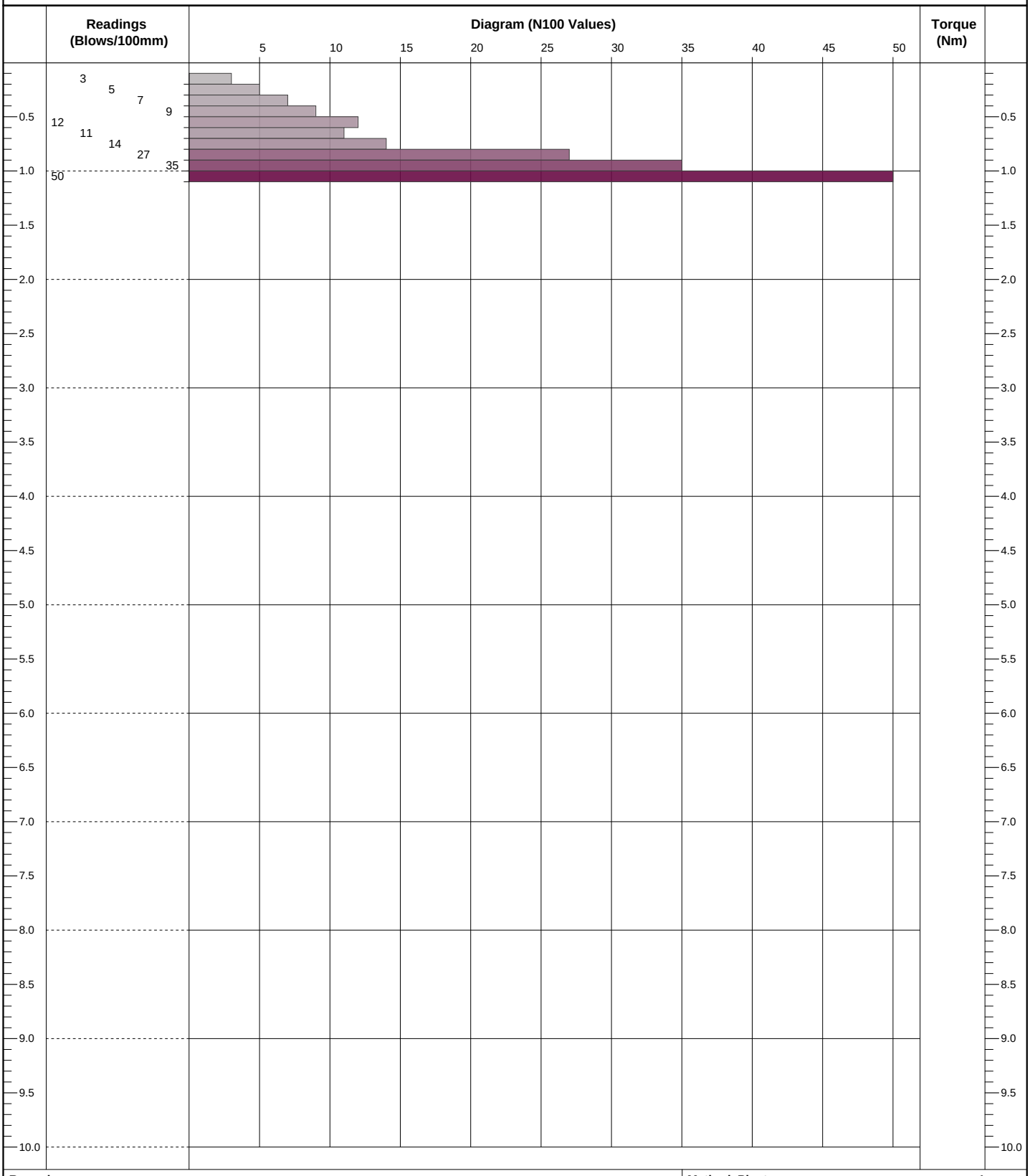
DP1

Sheet 1 of 1

Probe Type	Easting	Northing	Ground Level (m)	Scale
DPSH-B				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521		

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited



Remarks

Method, Plant

Logger

Hammer Weight (kg)	65.5
Hammer Drop (mm)	750
Cone Diameter (mm)	50
Cone Angle	
Rod Diameter (mm)	
Damper	

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

Dynamic Probe

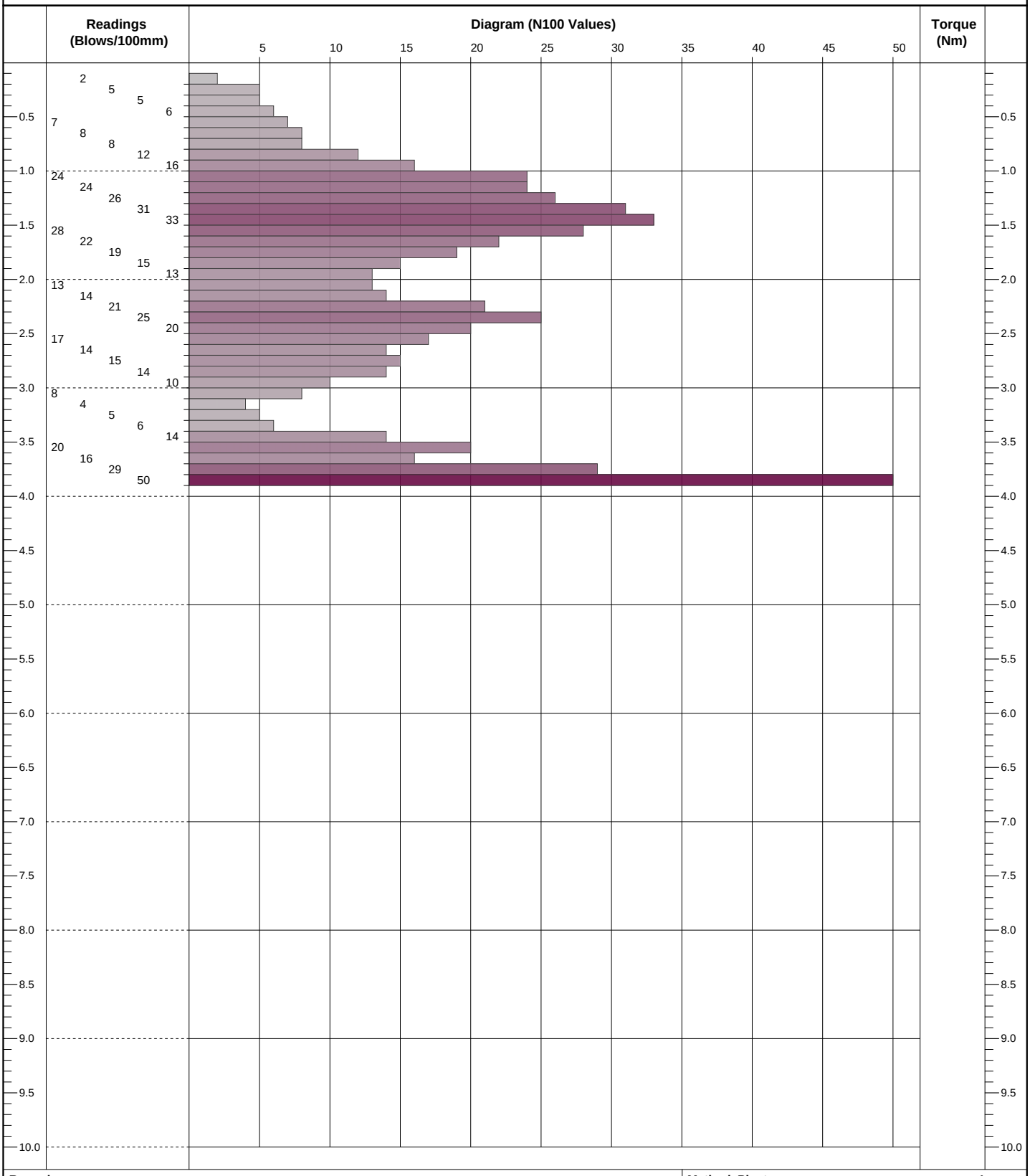
DP2

Sheet 1 of 1

Probe Type	Easting	Northing	Ground Level (m)	Scale
DPSH-B				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521		

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited



Remarks

Method, Plant

Logger

Hammer Weight (kg)	65.5
Hammer Drop (mm)	750
Cone Diameter (mm)	50
Cone Angle	
Rod Diameter (mm)	
Damper	

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

Dynamic Probe

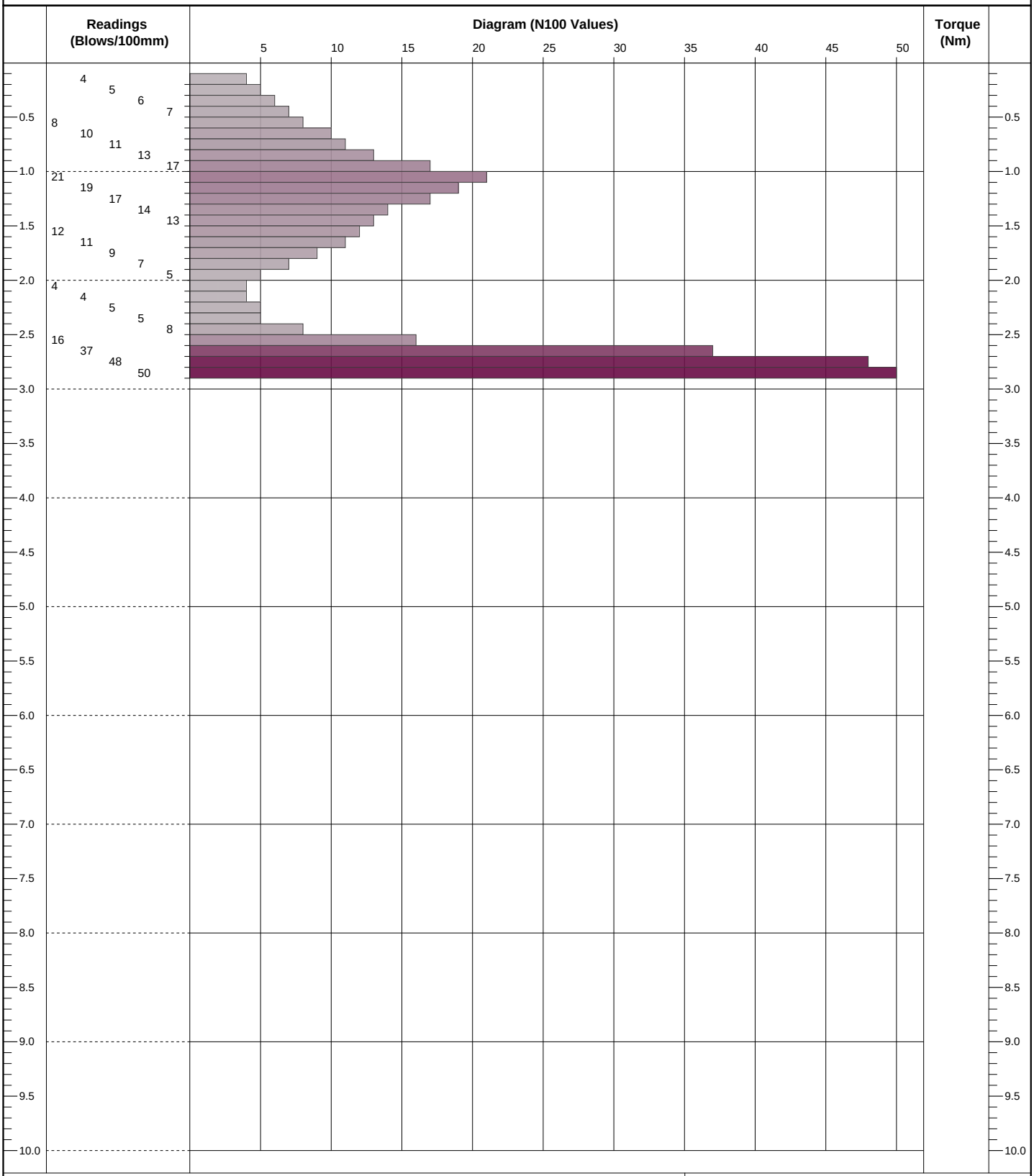
DP3

Sheet 1 of 1

Probe Type	Easting	Northing	Ground Level (m)	Scale
DPSH-B				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521		

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited



Remarks

Method, Plant

Logger

Hammer Weight (kg)	65.5
Hammer Drop (mm)	750
Cone Diameter (mm)	50
Cone Angle	
Rod Diameter (mm)	
Damper	

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

Dynamic Probe

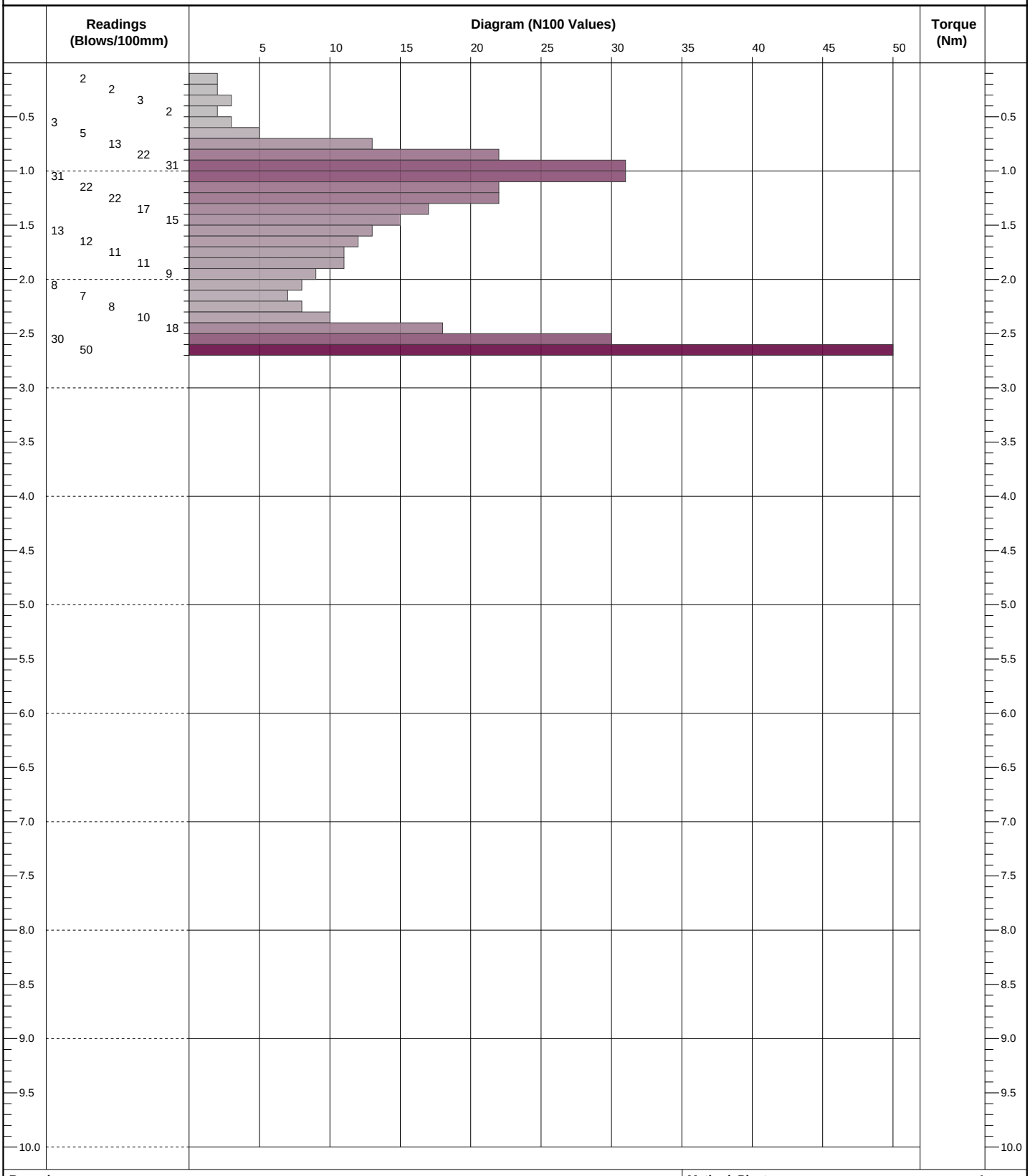
DP5

Sheet 1 of 1

Probe Type	Easting	Northing	Ground Level (m)	Scale
DPSH-B				1:50

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521		

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited



Remarks

Method, Plant

Logger

Hammer Weight (kg)	65.5
Hammer Drop (mm)	750
Cone Diameter (mm)	50
Cone Angle	
Rod Diameter (mm)	
Damper	

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

soils LIMITED

Trial Pit

TPSK1

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
TP				1:25

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521		

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
		0.10	B 1			(0.20) 0.20		Brown gravelly SILT. Gravel is subangular to subrounded fine to coarse of brick, glass, porcelain concrete and flint. [MADE GROUND]
		0.50	B 1			(0.40) 0.60		Dense brown fine SAND. Rare fine to coarse subangular fine to coarse gravel of brick. Frequent rootlets and small roots. [MADE GROUND]
		0.70	B 1			(0.20) 0.80		Yellow gravelly fine SAND. Gravel is angular to subangular fine to coarse of sandstone . Occasional rootlets and fine roots [Upper Tunbridge Wells Sand]
								End of Trial Pit at 0.80m

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Remarks
Roots encountred to 0.80m bgl

Method, Plant, Stability, Dimensions
0.00 - 0.80m JCB
Stable

Logger
SW

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

soils LIMITED

Trial Pit

TPSK2

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
TP				1:25

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521		

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
		0.10	B 1			(0.20) 0.20		Brown gravelly SILT. Gravel is subangular to subrounded fine to coarse of brick, glass, porcelain concrete and flint. [MADE GROUND]
		0.50	B 1			(0.40) 0.60		Dense brown fine SAND. Rare fine to coarse subangular fine to coarse gravel of brick. Frequent rootlets and small roots. [MADE GROUND]
		0.80	B 1			(0.30) 0.90		Yellow gravelly fine SAND. Gravel is angular to subangular fine to coarse of sandstone. Occasional rootlets and fine roots [Upper Tunbridge Wells Sand]
		1.00	B 1			(0.25) 1.15		Brown SANDSTONE. Recovered as angular to subangular cobbles of sandstone. [Upper Tunbridge Wells Sand]
								End of Trial Pit at 1.15m

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Remarks
Roots encountred to 0.90m bgl

Method, Plant, Stability, Dimensions
0.00 - 1.15m JCB
Stable

Logger
SW

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

Trial Pit

TPSK3

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
TP				1:25

Project Name	Project No.	Start Date	End Date
Wimblehurst Hotel, Horsham	22521		

Client	Consultant	Contractor
Ecotecture	Soils Limited	Soils Limited

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
		0.10	B 1					Yellowish brown gravelly fine SAND. Gravel is angular to subangular fine to coarse of brick, rare metal and sandstone. [MADE GROUND]
		0.50	B 1			(1.20)		
		1.00	B 1					
						1.20		*End of Trial Pit at 1.20m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Remarks
Roots encountred to 0.90m bgl

Method, Plant, Stability, Dimensions
0.00 - 1.15m HDTP
Stable

Logger
SW

Checked By: AC **Approved By:** AC **Status:** FINAL

Created using Pebble Geo

Soakaway Calculations

Trial Pit & Test No.	TPSK3 TEST 1	**Test Date**	03/08/2026
Site Name	Wimblehurst Hotel		
Project No.	22521		

Field Test

Trial Pit Log (include details of groundwater):

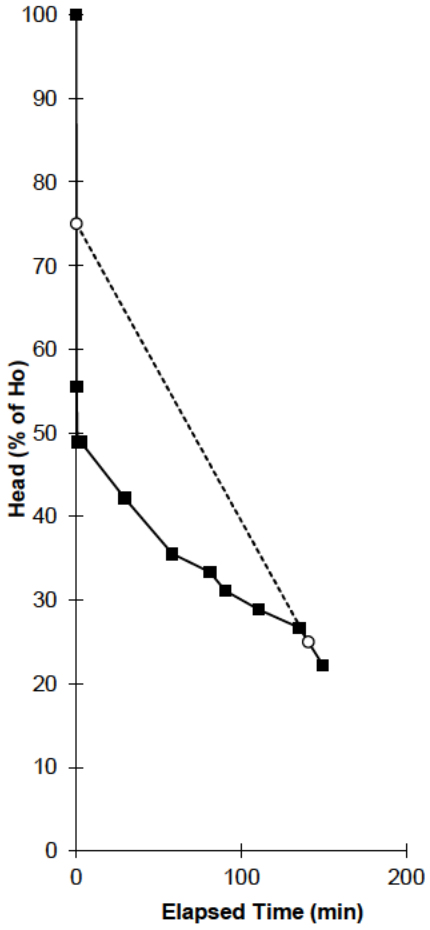
See trial Pit record

Depth of Pit	1.15 m
Width of Pit	0.30 m
Length of Pit	0.30 m
Starting Head of Water	0.45 m

as50	0.36 m2
Vp75-25	0.02025 m3
t75-25	140.4 min
water used	0.0405 m3
f	6.7E-06 m/sec.

Field Data

Depth to Water (m)	Elapsed Time (min)	Head of Water (% of Ho)	Head of Water (m)
0.70	0	100	0.45
0.90	0	56	0.25
0.93	1	49	0.22
0.93	1	49	0.22
0.93	3	49	0.22
0.96	29	42	0.19
0.99	58	36	0.16
1.00	81	33	0.15
1.01	90	31	0.14
1.02	110	29	0.13
1.03	135	27	0.12
1.05	149	22	0.10



T75	0.112	75
T25	140.512	25
T75-25	140.400	Derived from Best Fit

Comments

SOILS LIMITED

Telford House, Unit 11 Sun Valley Business Park
Winnall Close, Winchester, SO23 0LB

Telephone: 01962 673330

Appendix C Geotechnical In-Situ and Laboratory Testing

Appendix C.1 Classification

Classification based on SPT "N" values:
The inferred undrained strength of the cohesive soils was based on the SPT "N" blow counts, derived from the relationship suggested by Stroud (1974) and classified using Table C.1.1. (Ref: Stroud, M. A. 1974, "The Standard Penetration Test – its application and interpretation", Proc. ICE Conf. on Penetration Testing in the UK, Birmingham. Thomas Telford, London.).

Table C.1.1 SPT "N" Blow Count Cohesive Classification

Classification	Undrained Cohesive Strength C_u (kPa)
Extremely low	<10
Very low	10 – 20
Low	20 – 40
Medium	40 – 75
High	75 – 150
Very high	150 – 300
Extremely high	> 300

Note(s): (Ref: BS EN ISO 14688-2:2004+A1:2013 Clause 5.3.)

The relative density of granular soils was classified based of the relationship given in Table C.1.2.

The *UK National Annex to Eurocode 7: Geotechnical design – Part 2: Ground investigation and testing, NA 3.7 SPT test, BS EN 1997-2:2007, Annex F* states "Relative density descriptions on borehole records should also be based on uncorrected SPT N values, unless significantly disturbed, using the density classification in BS 5930:2015, Table 7.

Table C.1.2 SPT "N" Blow Count Granular Classification

Classification	SPT "N" blow count (blows/300mm)
Very loose	0 to 4
Loose	4 to 10
Medium dense	10 to 30
Dense	30 to 50
Very dense	Greater than 50

Note(s): (Ref: The Standard Penetration Test (SPT): Methods and Use, CIRIA Report 143, 1995)

Chalk samples recovered are disturbed by the sampling process. Therefore, it is difficult to assess an accurate chalk grade for in accordance with CIRIA C574 'Engineering in Chalk'. In the absence of a standardised correlation between SPT "N" values and chalk grade for the most recent chalk classification (CIRIA C574) a broad indication of the in-situ chalk grade can be assessed using a paper by T.R.M. Wakeling from a site in

Mundford, Norfolk, which compares SPT "N" values to the old Spink & Norbury chalk classification. From the Spink & Norbury classification it is possible to infer a basic CIRIA Grade (structureless or structured), as outlined in Table C.1.3.

Table C.1.3 Interpretation of SPT "N" Blow Counts in Chalk

SPT "N" Value Range	Spink & Norbury Grade	Inferred CIRIA Grade
<8	VI	Structureless (Dm)
8 – 15	V	Structureless (Dc)
15 – 20	IV	Structured chalk (C5 – A1)
20 - 25	III	Structured chalk (C5 – A1)
25 - 35	II	Structured chalk (C5 – A1)
>35	I	Structured chalk (C5 – A1)

Note(s):

Consistency for cohesive soils

Cohesive soils consistency terms like *soft, firm, stiff, very stiff* (for clays and silts) are based on **hand pressure tests** in the field (thumb penetration, finger pressure, etc.). These rely on the samplers or loggers judgement, so there is inevitably some subjectivity and may vary from the results of geotechnical tests.

Terms for description of consistency

Field description term	Consistency description definition [after BS EN ISO 14688-1:2002, 5.14]
Very soft	Finger easily pushed in up to 25 mm Exudes between fingers
Soft	Finger pushed in up to 10 mm Moulded by light finger pressure
Firm	Thumb makes impression easily Cannot be moulded by fingers, rolls in the hand to a 3 mm thick thread without breaking or crumbling
Stiff	Can be indented slightly by thumb Crumbles in rolling a 3 mm thick thread, but can then be remoulded into a lump
Very stiff	Can be indented by thumb nail Cannot be moulded but crumbles under pressure

NOTE 1 These subdivisions can be approximate, particularly in material of low plasticity.

NOTE 2 The description of materials of higher consistency than very stiff should use rock strengths and material names.

NOTE 3 Soils varying around the boundary between soil (very stiff consistency) and rock (extremely weak strength) can be described as, for example, "very stiff CLAY/extremely weak MUDSTONE". A boundary on the log at rockhead if it is a simple transition is preferable.

Classification of DCP results to CBR:

The DCP consists of a cone fixed to the bottom of a 575mm vertical rod. An 8kg weight is repeatedly lifted and dropped onto an anvil at the mid-height of the rod to deliver a 'blow'. A vertical scale alongside the rod is used to measure the depth of penetration of

the cone. These measurements are then converted to CBR values using the following equation derived from the DTP Interim Advice Note 73/06 – Design Guidance for Road Pavement Foundations:

$$Log_{10}(CBR) = 2.48 - 1.057 \times Log_{10}(mm/blow)$$

Appendix C.2 Interpretation

Table C.2.1 Interpretation of SPT Tests

BH	Strata	SPT N60 Blow Counts	Inferred Cohesive Strength
BH1	MG 0.0– 1.20 Gravel and gravelly SAND	N/A	Not Applicable
	UTW [C] 1.20 – 8.50 Gravelly sandy CLAY/SILT	19 – 56	High to Very High (Cu = 75 – 300 kPa)

Note(s): **Granular UTW was not encountered within BH1**

Table C.2.2 Interpretation of DPSH Blow Counts

DP	Strata	Equivalent SPT N60 Blow Counts	Inferred Cohesive Strength/Granular Density
DP1	UTW [G] 0.40 – 1.00	35 - 195	Dense to Very Dense
DP2	UTW[1] [G] 0.30 – 3.80	16 - 195	Medium dense to Very dense
DP3	TS 0.00 – 0.50	16 - 31	Medium dense to Dense
	UTW [G] 0.50 - 1.40	31 - 82	Dense to Very Dense
	UTW [C] 1.40 – 2.40	19 - 51	High to Very High (C_u = 75 – 300kPa)
	UTW[1] [G] 2.40 – 2.80	62 - 195	Very Dense
DP5	MG 0.00 – 1.15	8 - 121	Loose to Very Dense
	UTW [C] 1.15 – 2.60	27 - 195	High to Very High (C_u = 75 – 300kPa)

Note(s): [1] Ground conditions inferred past the base of windowless sampler boreholes. Also there was no dynamic probing for exploratory hole location WSDP4. [C] Cohesive [G] Granular [2]All locations DP1, DP2, DP3 and DP5 refused at a shallower depth than originally scheduled (5m).

Table C.2.3 Interpretation of Atterberg Limit Tests

Stratum	M/C (%)	PI (%)	>425µm (%)	Mod PI (%)	Class	VCP	
						BRE	NHBC
UTW	12.6 – 17.6	13 - 25	88 - 93	16 – 22.8	CL - CI	Low to Medium	Low to Medium

Note(s): BRE Volume Change Potential refers to BRE Digest 240 (based on Atterberg results). VCP=Volume Change Potential
NHBC Volume Change Potential refers to NHBC Standards Chapter 4.2
Soils Classification based on British Soil Classification System
The Atterberg Limit Tests were undertaken in accordance with BS 1377:Part 2:1990 Clauses 3.2, 4.3 and 5

Table C.2.3 Interpretation of PSD Tests

Location	Depth (m bgl)	Soil Description	VCP		<63µm Sieve (%)
			BRE	NHBC	
BH1	1.00 – 2.50	Firm to stiff sandy CLAY	Yes	Yes	53
TPSK2	0.80 – 1.00	Brown sandstone. Recovered as sand.	Yes	Yes	42
WS1/2/5	0.70-2.50	Firm to stiff gravelly SILT and gravelly SAND	Yes	Yes	78
WS1	0.70 – 1.00	SANDSTONE. Recovered as grey gravel of sandstone.	Yes	Yes	89
WS2	0.80 – 1.05	Gravelly fine to medium SAND	Yes	Yes	66
WS5	2.00 – 4.00	Firm to stiff yellowish brown SILT	Yes	Yes	92

Note(s): (The Particle Size Distribution Tests were undertaken in accordance with BS 1377: Part 2: 1990 Clause 9).
VCP=Volume Change Potential

Appendix C.3 Geotechnical In-Situ and Laboratory Results

Laboratory Report

UKAS TESTING 2788

GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES
A PHENNA GROUP COMPANY

Contract Number: 88627

Client Ref: **22521/AN**
Client PO: **22521/AN**

Client: **Soils Limited**

Contract Title: **Wimblehurst Hotel**
For the attention of: **Akshay Nair**

Date Received: **20-08-2026**
Date Completed: **11-09-2026**
Report Date: **11-09-2026**

This report has been checked and approved by:

[redacted]

Darren Bourne
Quality Senior Technician

Description	Qty
Determination of water content BS EN ISO 17892-1:2014 - * UKAS	3
1 point Liquid & Plastic Limit.. BS EN ISO 17892-12 - * UKAS	3
Particle Size Distribution BS EN ISO 17892-4 : 5.1 - * UKAS	6

Notes: **Observations and Interpretations are outside the UKAS Accreditation**
*** - denotes test included in laboratory scope of accreditation**
 # - denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This test report/certificate shall not be reproduced except in full, without the approval of GEO Site & Testing Services Ltd. Any opinions or interpretations stated - within this report/certificate are excluded from the laboratories UKAS accreditation.

Approved Signatories:
Brendan Evans (Business Support Co-ordinator) - Darren Bourne (Quality Senior Technician) - Jason Jenkins (Business Development Manager)
Luke Williams (Senior Laboratory Technician) - Paul Evans (Director) - Richard John (Quality/Technical Manager)
Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager) - Wayne Honey (HR & HSE Manager)

GEO Site & Testing Services Ltd
Unit 3-4 Heol Aur, Dafen Ind Est, Llanelli, Carmarthenshire SA14 8QN
Tel: 01554 784 040 Fax: 01554 784 040 info@gstl.co.uk https://gstl.co.uk

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	WATER CONTENT, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX BS 1377-2:2022 Clause 5.3 BS EN ISO 17892-12:2018+A2:2022 1 Point Liquid Limit BS EN ISO 17892-1:2014+A1:2022 Determination of Water Content	
Contract Number	88627	
Project Name	Wimblehurst Hotel	
Date Tested	28/08/2026	
	DESCRIPTIONS	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Descriptions
WS3		D	1.85	-		Brown fine gravelly silty CLAY
WS4		D	2.00	-		Brown fine gravelly slightly sandy CLAY
BH1		D	4.00	-		Brown fine gravelly slightly sandy CLAY
				-		
				-		
				-		
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Operator
Liam. D

GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

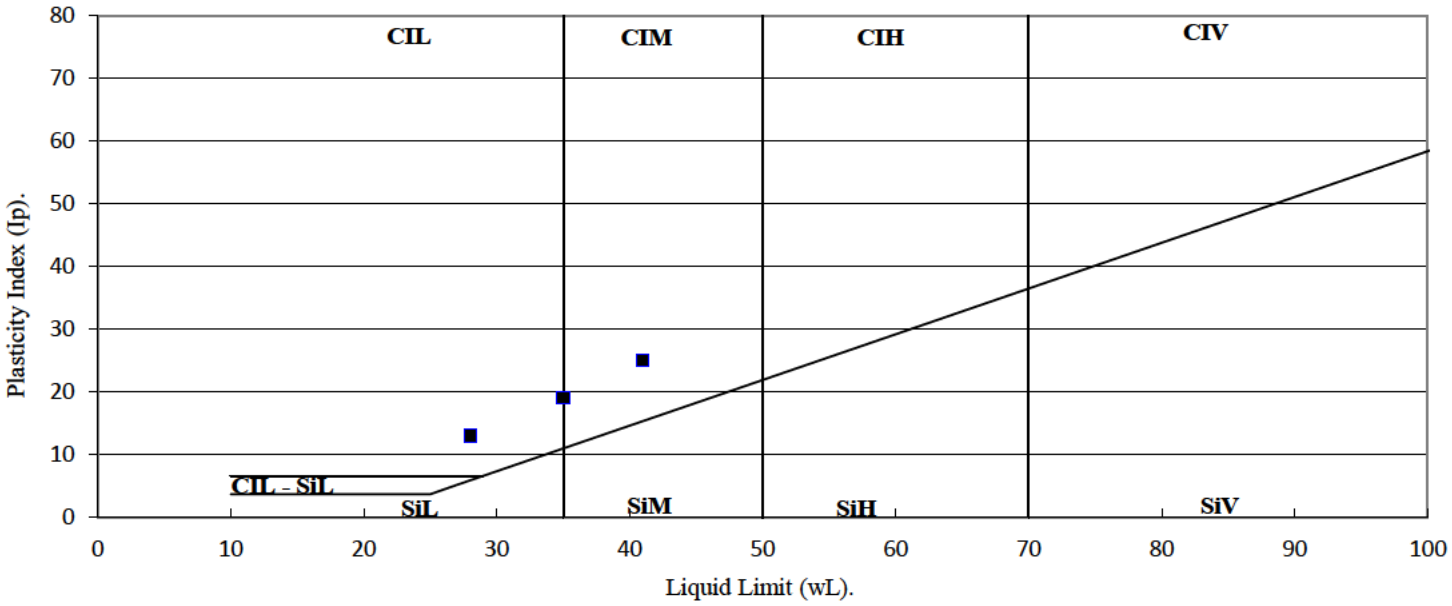
WATER CONTENT, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
BS 1377-2:2022 Clause 5.3
BS EN ISO 17892-12:2018+A2:2022 1 Point Liquid Limit
BS EN ISO 17892-1:2014+A1:2022 Determination of Water Content

Contract Number	88627
Project Name	Wimblehurst Hotel
Date Tested	28/08/2026
Test Comments	80g/30° Fall cone used

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Water Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing 0.425mm %	Factor Applied	Remarks
WS3		D	1.85	-		17.6	35	16	19	88	0.970	CL/I Low/Inter. Plasticity
WS4		D	2.00	-		16.7	28	15	13	93	0.990	CL Low Plasticity
BH1		D	4.00	-		12.6	41	16	25	91	1.008	CI Intermediate Plasticity
				-								
				-								
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				-								

SYMBOLS : NP = Non Plastic

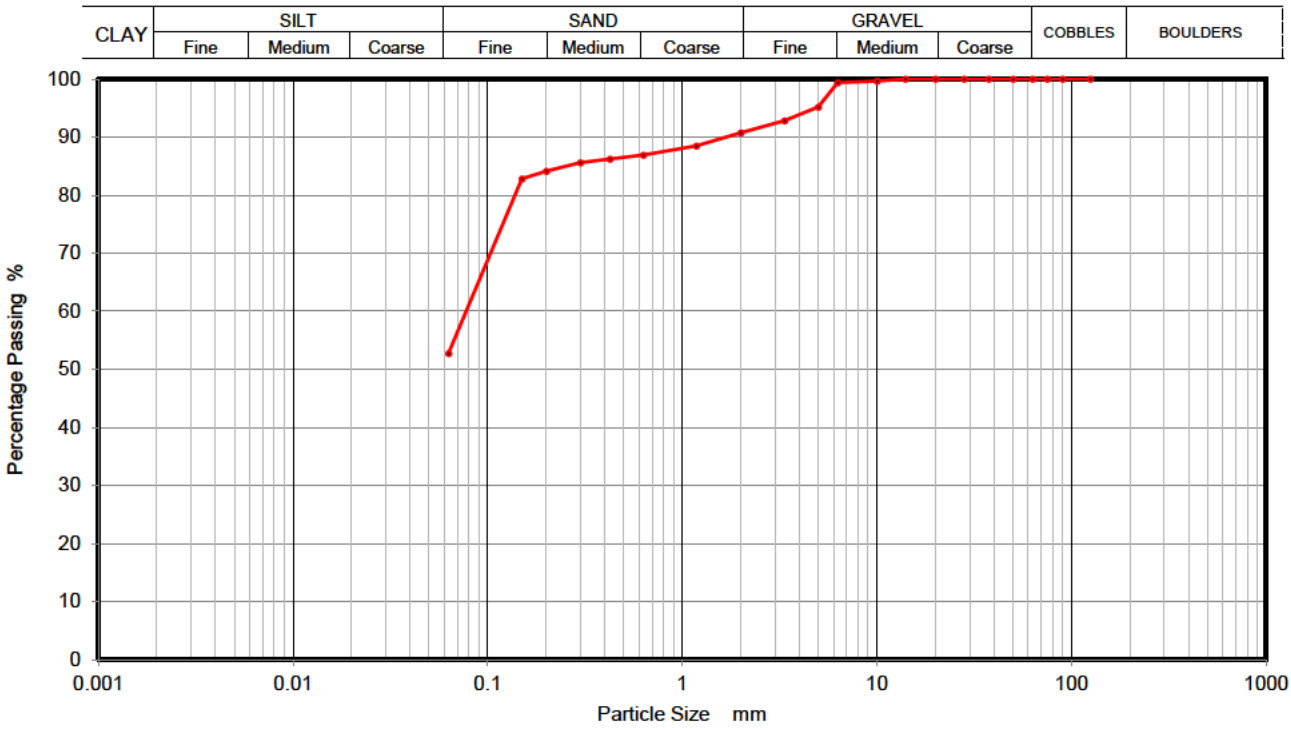
PLASTICITY CHART
BS EN ISO 14688-2:2018 Clause 4.4



***For sample descriptions please see sample descriptions sheet**

Operator
Liam. D

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377-2:2022 Clause 10 & BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**88627**
		Borehole/Pit No.	**BH1**
Project Name	**Wimblehurst Hotel**	Sample No.	
Sample Description	Brown gravelly fine to coarse sandy SILT/ CLAY	Depth Top	**1.00**
		Depth Base	**2.50**
Date Tested	05/09/2026	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	95		
3.35	93		
2	91		
1.18	89		
0.63	87		
0.425	86		
0.30	86		
0.20	84		
0.15	83		
0.063	53		

Sample Proportions	% dry mass
Cobbles	0
Gravel	9
Sand	38
Silt and Clay	53

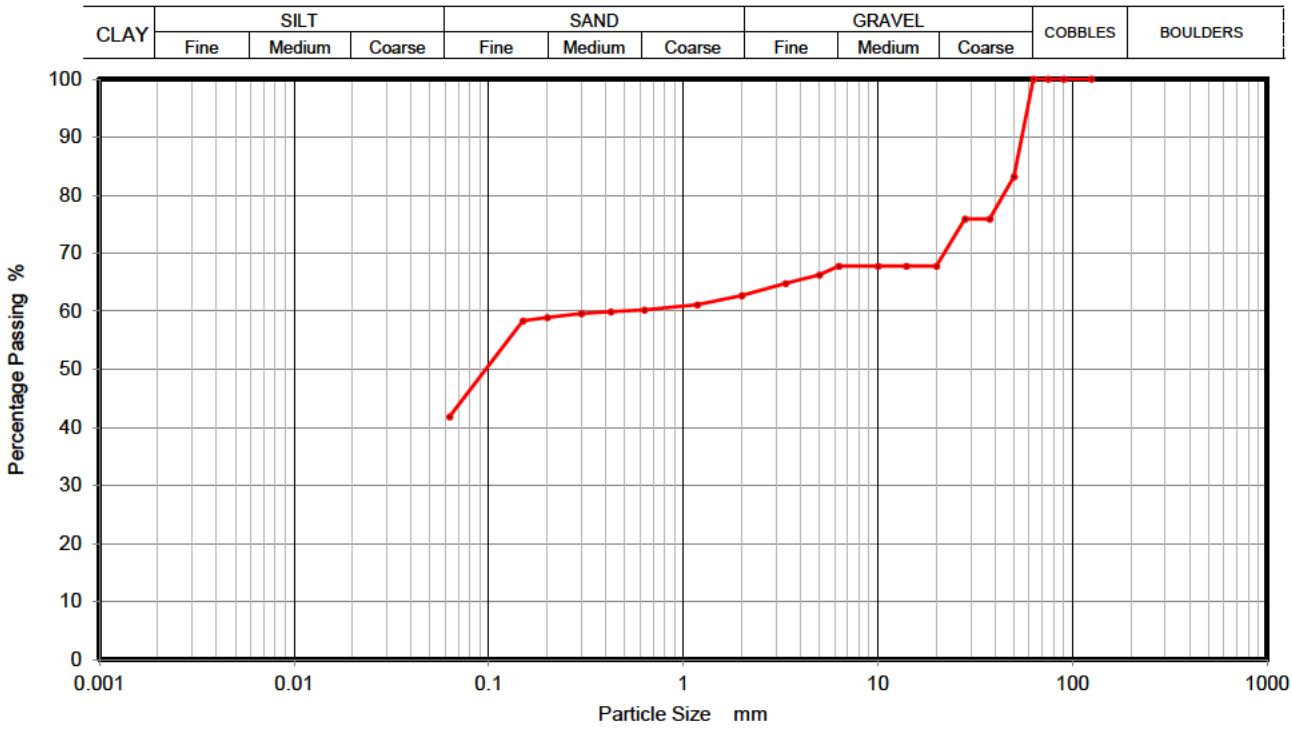
Grading Analysis	
Uniformity Coefficient	N/A

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Ben. J

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377-2:2022 Clause 10 & BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**88627**
		Borehole/Pit No.	**TPSK2**
Project Name	**Wimblehurst Hotel**	Sample No.	
Sample Description	Brown fine to coarse sandy fine to coarse gravelly SILT/ CLAY	Depth Top	**0.80**
		Depth Base	**1.00**
Date Tested	05/09/2026	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	83		
37.5	76		
28	76		
20	68		
14	68		
10	68		
6.3	68		
5	66		
3.35	65		
2	63		
1.18	61		
0.63	60		
0.425	60		
0.30	60		
0.20	59		
0.15	58		
0.063	42		

Sample Proportions	% dry mass
Cobbles	0
Gravel	37
Sand	21
Silt and Clay	42

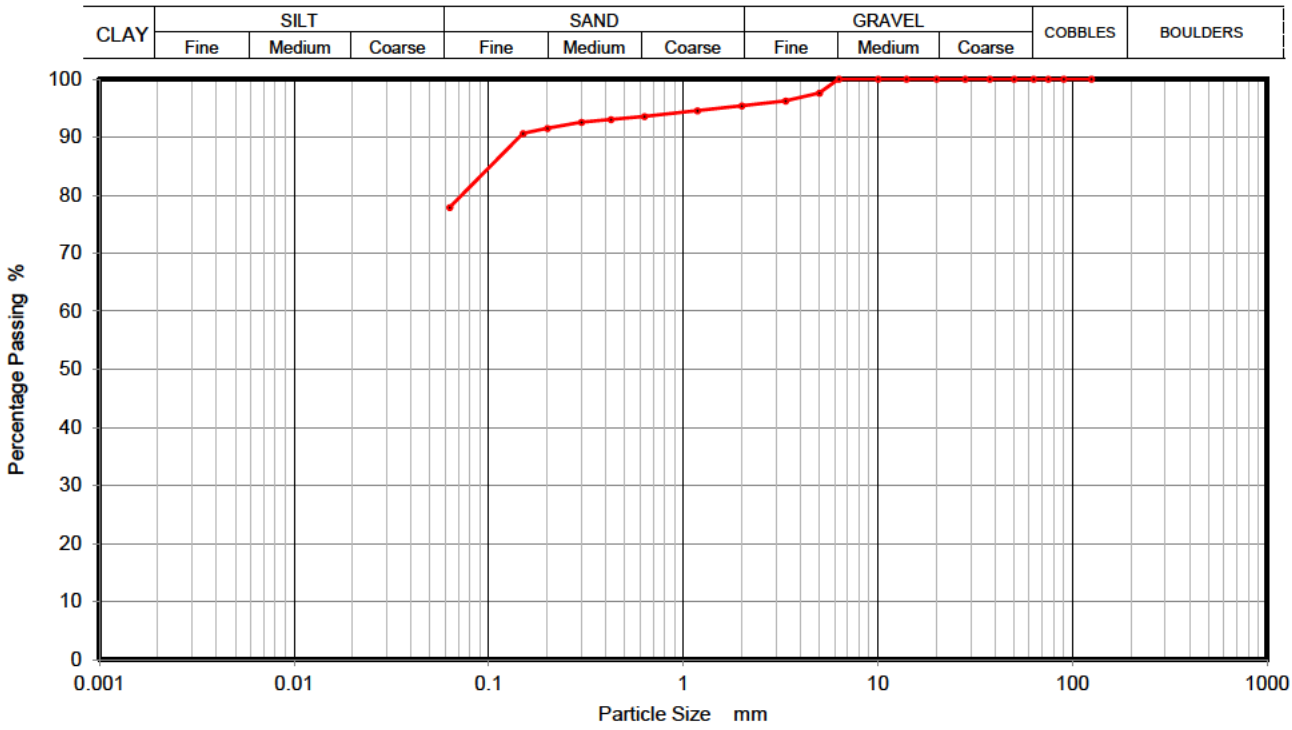
Grading Analysis	
Uniformity Coefficient	N/A

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Ben. J

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377-2:2022 Clause 10 & BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**88627**
		Borehole/Pit No.	**WS1/2/5**
Project Name	**Wimblehurst Hotel**	Sample No.	
Sample Description	Brown gravelly fine to coarse sandy SILT/ CLAY	Depth Top	**0.70**
		Depth Base	**2.50**
Date Tested	05/09/2026	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	98		
3.35	96		
2	95		
1.18	95		
0.63	94		
0.425	93		
0.30	93		
0.20	92		
0.15	91		
0.063	78		

Sample Proportions	% dry mass
Cobbles	0
Gravel	5
Sand	17
Silt and Clay	78

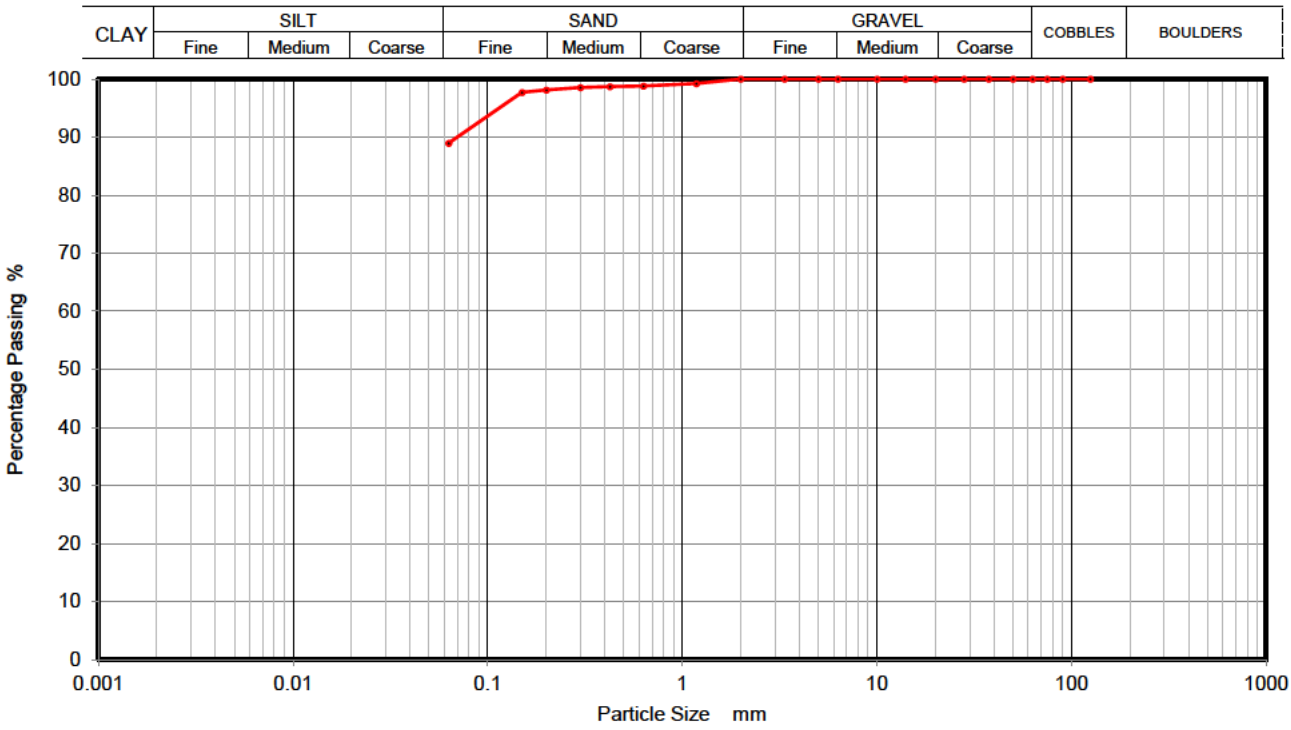
Grading Analysis	
Uniformity Coefficient	N/A

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Ben. J

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377-2:2022 Clause 10 & BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**88627**
		Borehole/Pit No.	**WS1**
Project Name	**Wimblehurst Hotel**	Sample No.	
Sample Description	Brown fine to coarse sandy SILT/ CLAY	Depth Top	**0.70**
		Depth Base	**1.00**
Date Tested	05/09/2026	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99		
0.63	99		
0.425	99		
0.30	99		
0.20	98		
0.15	98		
0.063	89		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	11
Silt and Clay	89

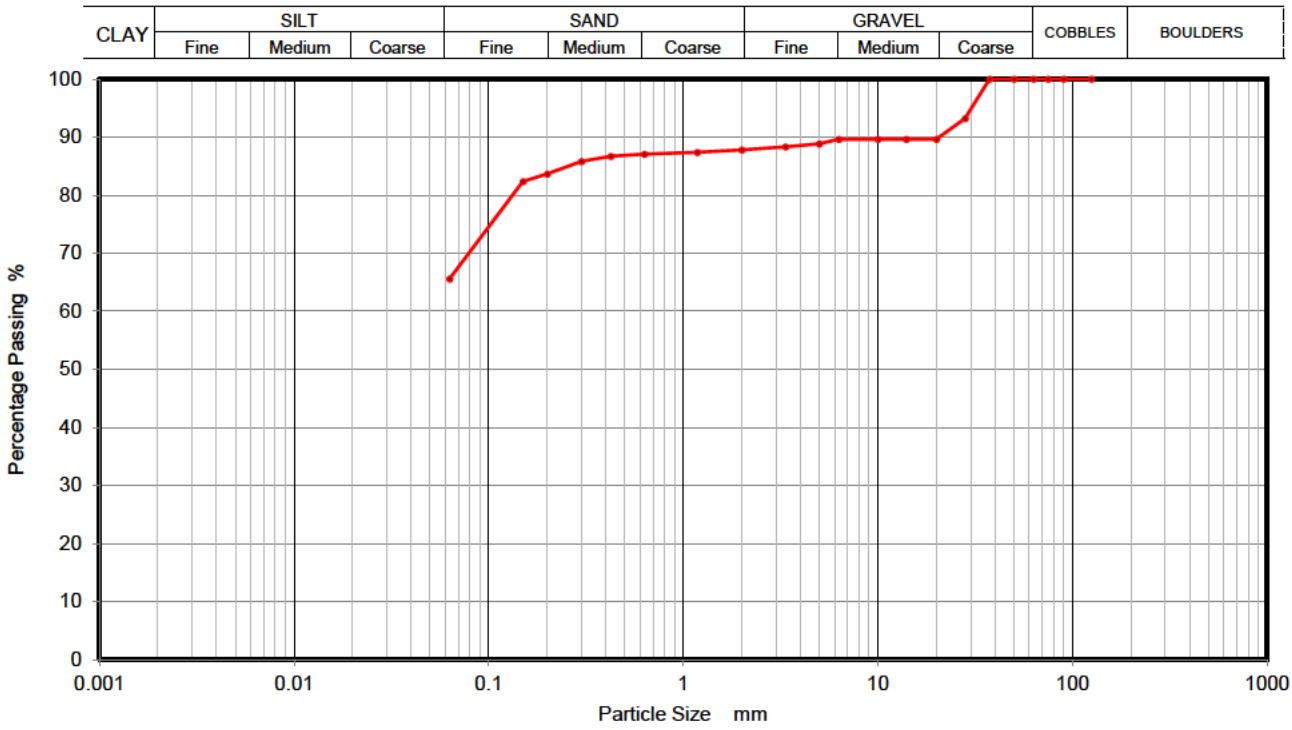
Grading Analysis	
Uniformity Coefficient	N/A

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Ben. J

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377-2:2022 Clause 10 & BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**88627**
		Borehole/Pit No.	**WS2**
Project Name	**Wimblehurst Hotel**	Sample No.	
Sample Description	Brown fine to coarse gravelly fine to coarse sandy SILT/ CLAY	Depth Top	**0.80**
		Depth Base	**1.05**
Date Tested	05/09/2026	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	93		
20	90		
14	90		
10	90		
6.3	90		
5	89		
3.35	88		
2	88		
1.18	87		
0.63	87		
0.425	87		
0.30	86		
0.20	84		
0.15	82		
0.063	66		

Sample Proportions	% dry mass
Cobbles	0
Gravel	12
Sand	22
Silt and Clay	66

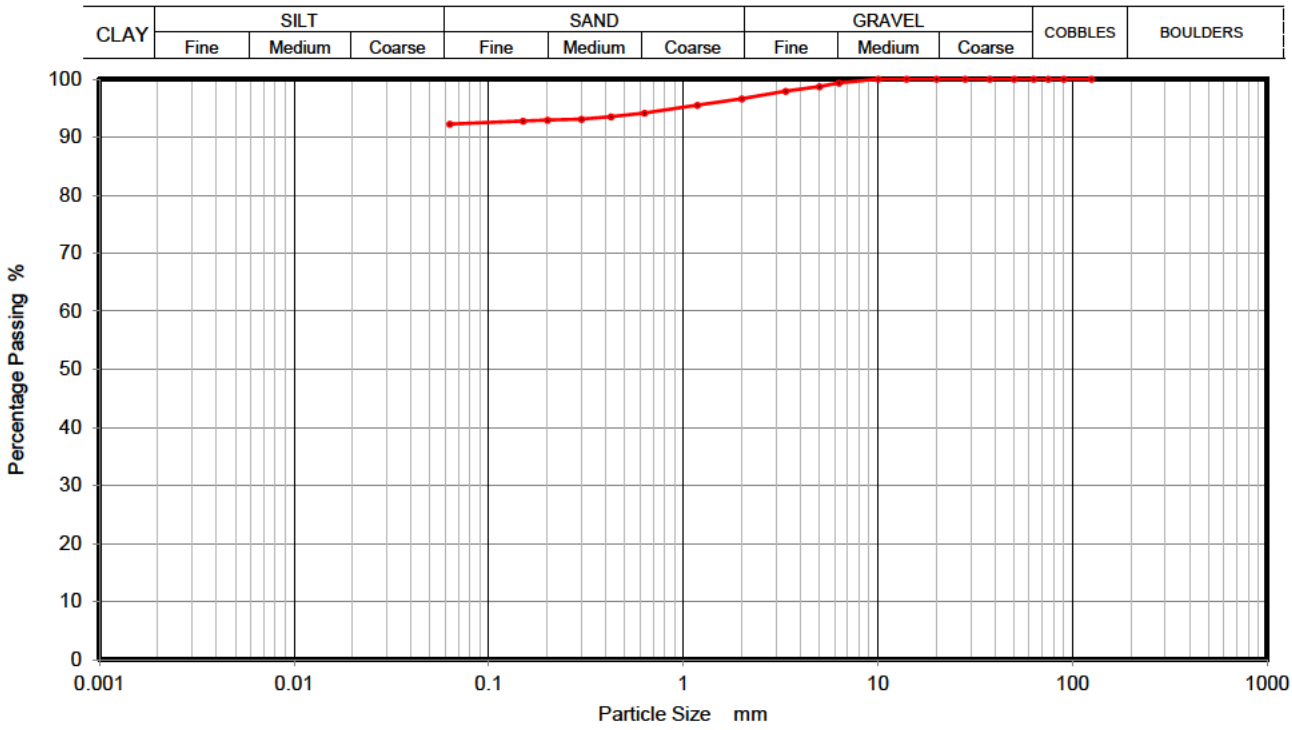
Grading Analysis	
Uniformity Coefficient	N/A

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Ben. J

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377-2:2022 Clause 10 & BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**88627**
		Borehole/Pit No.	**WS5**
Project Name	**Wimblehurst Hotel**	Sample No.	
Sample Description	Brown gravelly sandy SILT/ CLAY	Depth Top	**2.00**
		Depth Base	**4.00**
Date Tested	05/09/2026	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	99		
3.35	98		
2	97		
1.18	96		
0.63	94		
0.425	94		
0.30	93		
0.20	93		
0.15	93		
0.063	92		

Sample Proportions	% dry mass
Cobbles	0
Gravel	3
Sand	5
Silt and Clay	92

Grading Analysis	
Uniformity Coefficient	N/A

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Ben. J

Appendix D Chemical Laboratory Analyses

Appendix D.1 Chemical Laboratory Results

Certificate of Analysis

Certificate Number 26-20680 *Issued:* 15-Sep-26

Client Soils Limited
Telford House
Sun Valley Business Park
Winnall Close
Winchester
SO23 0LB

Our Reference 26-20680

Client Reference ~ 22521

Order No ~ 22521/AN

Contract Title ~ Wimblehurst Hotel

Description 4 Soil samples.

Date Received 20-Aug-26

Date Started 20-Aug-26

Date Completed 15-Sep-26

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]

Reyhan Irfan
Operations Manager

2139

Sample Deviations present. See Deviation Table Section for details.

Summary of Chemical Analysis
Soil Samples

Our Ref 26-20680
Client Ref ~ 22521
Contract Title ~ Wimblehurst Hotel

	Lab No	2738520	2738521	2738522	2738523
	Sample ID ~	TPSK1	BH1	WS3	TPSK3
	Depth ~	0.50	5.50	1.50	1.00
	Other ID ~				
	Sample Type ~	SOIL	SOIL	SOIL	SOIL
	Sampling Date ~	03/08/2026	03/08/2026	03/08/2026	03/08/2026
	Sampling Time ~	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Metals					
Magnesium Aqueous Extract (2:1)	DETSC 2076*	10	mg/l	< 10	< 10	< 10	< 10
Inorganics					
pH	DETSC 2008#		pH	8.1	7.7	5.2	7.1
Ammoniacal Nitrogen as NH4	DETSC 2119*	0.5	mg/kg	2.6	4.4	7.9	7.5
Chloride Aqueous Extract (2:1)	DETSC 2055	1	mg/l	27	7.3	29	10
Nitrite as NO2	DETSC 2055	1	mg/kg	4.9	< 1.0	1.9	1.5
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	68	93	23	21
Sulphur as S, Total	DETSC 2320	0.01	%	0.03	0.08	0.03	0.03
Sulphate as SO4, Total	DETSC 2321#	100	mg/kg	396	313	145	156

Information in Support of the Analytical Results

Our Ref 26-20680
Client Ref ~ 22521
Contract ~ Wimblehurst Hotel

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2738520	TPSK1 0.50 SOIL	03/08/26	PT 1L	Ammonia (3 days), Total Sulphur ICP (7 days), pH + Conductivity (7 days)	
2738521	BH1 5.50 SOIL	03/08/26	PT 1L	Ammonia (3 days), Total Sulphur ICP (7 days), pH + Conductivity (7 days)	
2738522	WS3 1.50 SOIL	03/08/26	PT 1L	Ammonia (3 days), Total Sulphur ICP (7 days), pH + Conductivity (7 days)	
2738523	TPSK3 1.00 SOIL	03/08/26	PT 1L	Ammonia (3 days), Total Sulphur ICP (7 days), pH + Conductivity (7 days)	

Key: P-Plastic T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Key:
~ Sample details are provided by the client and can affect the validity of the results
***** -not accredited.
# -MCERTS (accreditation only applies if report carries the MCERTS logo).
$ -subcontracted.
n/s -not supplied.
I/S -insufficient sample.
U/S -unsuitable sample.
t/f -to follow.
nd -not detected.

End of Report Ver 26.05.23

Appendix E Information Provided by the Client



Notes

Do not scale from this drawing except for planning purposes. All dimensions must be checked on site before any work begins.

All goods, materials, and workmanship must comply with current Building Regulations, British Standards, and relevant Codes of Practice.

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Drawing to be printed A1

N

0m 2m 4m 6m 8m 10m

Scale 1 200

RevID	Transmitted By	Transmittal Set Date	Layout Comment

ecotecture
ECOLOGICAL ARCHITECTURE

01444 416745 info@ecotecture.co.uk
www.ecotecture.co.uk

31 Sussex Road Haywards Heath
West Sussex RH16 4DZ

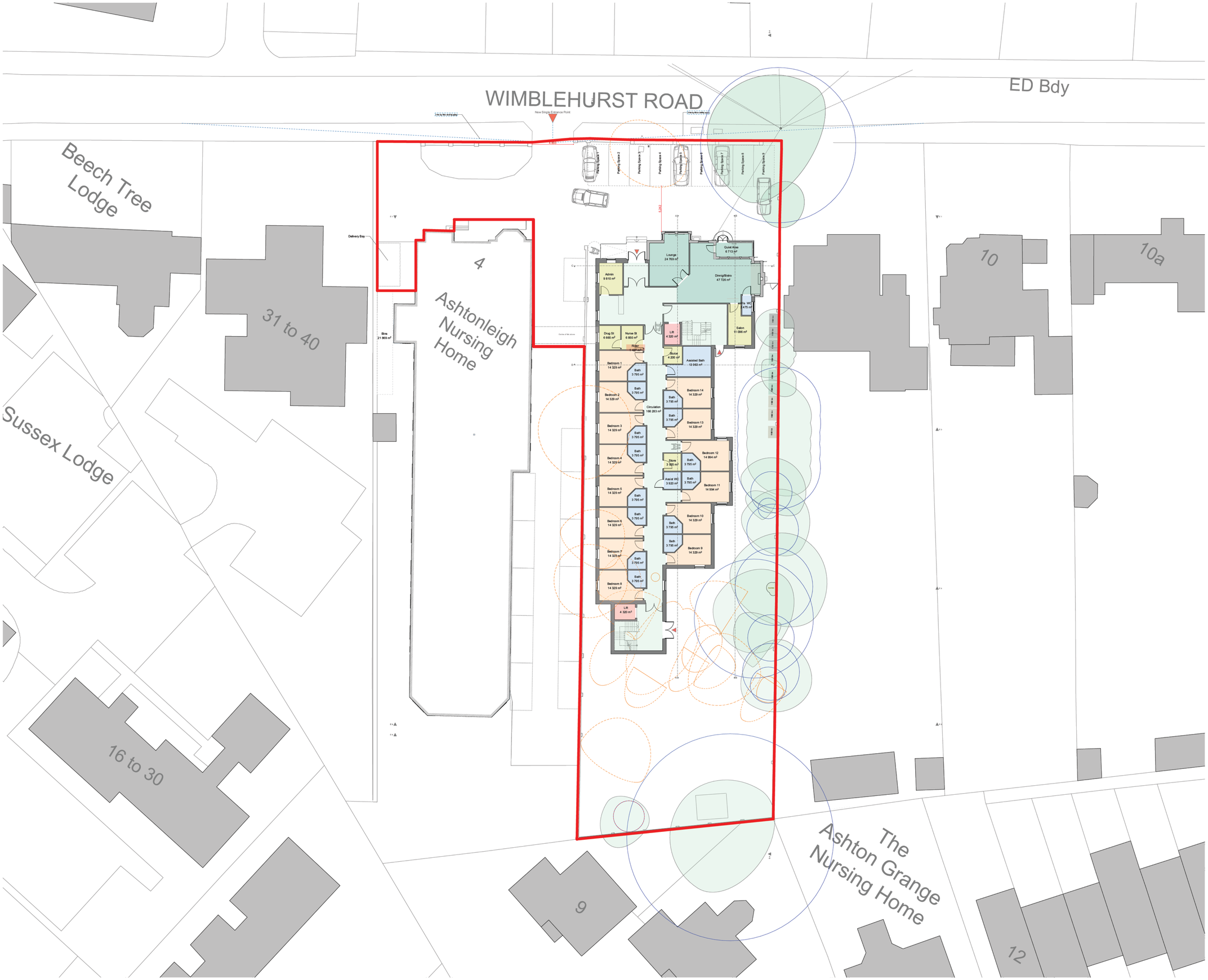
Client: Ashton Nursing Homes Ltd

Address: Wimblehurst Hotel/ Ashtonleigh Nursing Home
Horsham
West Sussex, RH12 2ED

Description: Proposed Site Plan

Scale: 1:200 Date:
Drawn: AT Checked: JS

Drawing No: 866/301B



Notes

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Drawing to be printed A1

N

0m 2m 4m 6m 8m 10m

Scale 1 200

Key

Trees Retained

Trees demolished

Tree Root Protection Area

PROPOSED

RevID	Transmitted By	Transmittal Set Date	Layout Comment

ecotecture
ECOLOGICAL ARCHITECTURE

01444 416745 info@ecotecture.co.uk
www.ecotecture.co.uk

31 Sussex Road Haywards Heath
West Sussex RH16 4DZ

Client: Ashton Nursing Homes Ltd

Address: Wimblehurst Hotel/ Ashtonleigh Nursing Home
Horsham
West Sussex, RH12 2ED

Description: Proposed Tree Root Protection Area

Scale: 1:200 Date:
Drawn: AT Checked: JS

Drawing No: 866 /351A



Existing Block Plan

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Notes

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Drawing to be printed A1

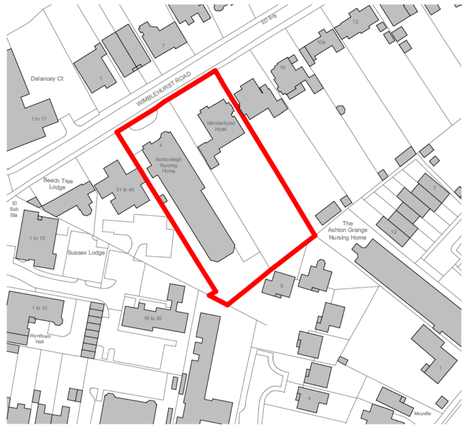
N

0m 2m 4m 6m 8m 10m

Scale 1 200

0m 10m 20m 30m 40m 50m 60m

Scale 1 1250



Existing Location Plan

Rev/D	Transmitted By	Transmittal Set Date	Layout Comment

ecotecture
ECOLOGICAL ARCHITECTURE

01444 416745 info@ecotecture.co.uk
www.ecotecture.co.uk

31 Sussex Road Haywards Heath
West Sussex RH16 4DZ

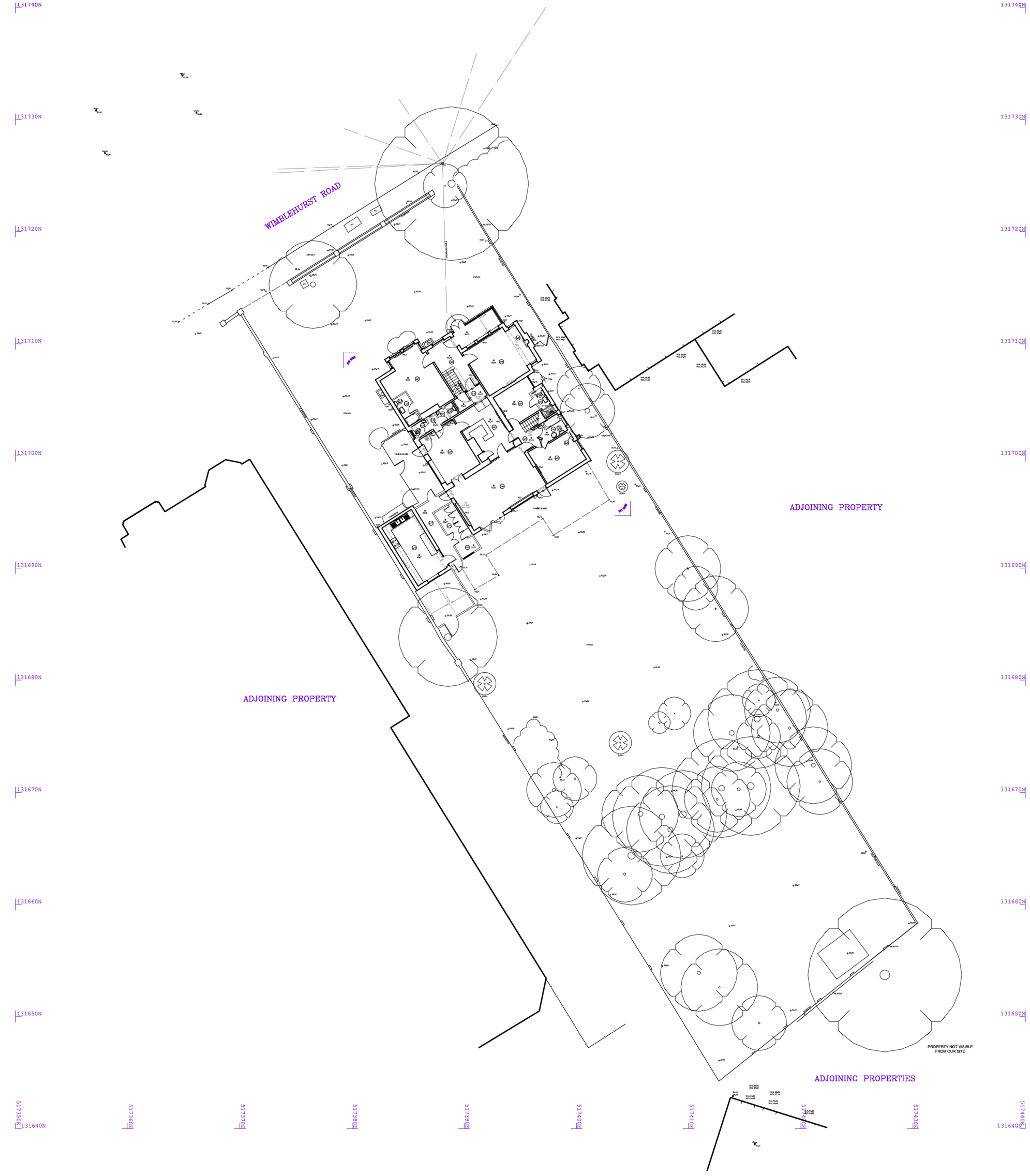
Client: Ashton Nursing Homes Ltd

Address: Wimblehurst Hotel/ Ashtonleigh Nursing Home
Horsham
West Sussex, RH12 2ED

Description: Existing Location and Block Plan

Scale: 1:200, 1:1250 Date: May 2026
Drawn: AT Checked: JS

Drawing No: 866 /100A



APPROXIMATE DIRECTION OF NORTH

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Drawing Naming Convention:

Job No\Code\Dwg type\Location\Ref

Code:	02 = Existing				
Dwg Type:	B = Building		E = Elevation		
	S = Section		T = Topographical		
Location:	B = Basement		C = Ceiling Plan		
	E = External		F = Front		
	G = Ground		S = Side		
	1 = First		R = Rear		
	R = Roof		GA = General Layout		
	M = Mezzanine		AA = Section A-A		
Ref	Ref to Individual dwg I.D. (e.g. Revision)				

Standard Abbreviations (where applicable):

Building Survey

AB	AIR BRICK
ACU	AIR CONDITIONING UNIT
AH	ACCESS HATCH
AP	ACCESS PANEL
AV	AIR VALVE
BH	BEAM HT.
BR	BOILER
BSL	BEAM SOFFIT LEVEL
CB	CUPBOARD
CC	CEILING CHANGE
CIH	CLEAR INTERNAL HT
C-A	CILL TO APEX HT
C-H	CILL TO HEAD HT
C-S	CILL TO SPRING HT
DB	DOOR BASE HT
DH	DOOR HEAD HT
FA	FIRE ALARM
FAB	FIRE ALARM BELL
FX	FIRE EXTINGUISHER
F-A	FLOOR TO APEX HT
F-C	FLOOR TO CILL HT
F-H	FLOOR TO HEAD HT
F-S	FLOOR TO SPRING HT
GEA	GROSS EXTERNAL AREA
GIA	GROSS INTERNAL AREA
GU	GULLY
HT	HEATER
HW	HOT WATER TANK
NIA	NET INTERNAL AREA
NTS	NOT TO SCALE
RAD	RADIATOR
RE	RECESS HEAD HEIGHT
RFV	RAISED FLOOR VOID
RL	ROOF LIGHT
RSH	ROLLER SHUTTER
RWP	RAIN WATER PIPE
SPO	SPOT LIGHT
SVP	SOIL VENT PIPE
V	VENT

Land Survey

B	BOLLARD
BS	BRICK SETTS
BT	B.T. COVER
CAM	CAMERA
CATV	CABLE TV COVER
CL	COVER LEVEL
EL	ELECTRIC COVER
EP	ELECTRIC POLE
ER	EARTH ROD
FB	FLOWERBED
FH	FIRE HYDRANT
FW	FOUL WATER
GU	GULLY
GV	GAS VALVE
IC	INSPECTION COVER
IL	INVERT LEVEL
LP	LAMP POST
MH	MANHOLE
OHT	OVERHEAD TELECOM
P	POST
PM	PARKING METER
PI	PIPE
RO	RODDING EYE
RS	ROAD SIGN
RTW	RETAINING WALL
RWP	RAIN WATER PIPE
SA	SITE AREA
SI	SIGN
STU	TREE STUMP
SV	STOP VALVE
SVP	SOIL VENT PIPE
SW	STORM WATER
TOF	TOP OF FENCE
TOW	TOP OF WALL
TP	TELEGRAPH POLE
UTL	UNABLE TO LIFT
VP	VENT PIPE
WM	WATER METER
WT	WATER TAP

Symbols (where applicable):

Direction of sloping ceiling

2c PLUG SOCKET 2 =NO. OF SOCKETS

o1 LIGHT SWITCH 1 =NO. OF SWITCHES

2.65 FLOOR TO STRUCTURAL CEILING HT

2.65 FLOOR TO SUSPENDED CEILING HT

10.00 FLOOR LEVEL RELATIVE TO DATUM

Notes:

The Survey has been computed to ordnance survey 'Active Network'

All levels are in metres and relate to ordnance survey 'Active Network'

All direction arrows indicate UP unless otherwise stated.

Drainage pipe sizes (where shown) have been gauged from the surface (for safety reasons) and should be regarded as approximate only.

Visible features in the vicinity of any boundaries, as shown on this survey, may not represent the extent of legally conveyed ownership.

Whilst every effort has been made to determine wall materials, no guarantee is given. Materials should be regarded as assumed unless verified by a qualified third party.

Tree spread and height are approximate. Species should be regarded as assumed unless verified by a qualified third party.

Rev	Date	By	Description

HB Surveys Ltd
Land & Measured Building Surveyors
Spring House, 60 Poplar Way, Midhurst, West Sussex GU29 9TA
t. 01730 814884 info@hbsurveys.com

Client:
ASHTON NURSING HOMES Ltd

Project:
WIMBLEHURST HOTEL
WIMBLEHURST ROAD
HORSHAM

Drawing Title:
EXISTING
TOPOGRAPHICAL SURVEY

Date:	Scale:	Surveyor:	Drawn:	Checked:
NOV 2025	1:200@A1	KR	KR	HB

Job No:	Drawing No:	Sheet No:	Rev:
25064	25064-02-T-E	2 of 8	

Soils Limited
Geotechnical & Environmental Consultants

Telford House,
Unit 11 Sun Valley Business Park,
Winnall Close,
Winchester,
England SO23 0LB

T: 01962 673 330
W: soilslimited.co.uk