

5th August 2022

Our Ref: CSG/ 17555

We Are Matter
Studio 12
Bureau C3 Design District
13 Soames Walk
Greenwich Peninsula
London
SE10 0AX

For the attention of C.Hsieh.,

Dear Madam,

Re: 9 Bracknell Gardens London NW3 7EE : Standpipe Installation

SECTION 1 INTRODUCTION

- 1.01 In accordance with your instructions, we visited the above site during July 2022 with return inspections in July and August 2022.
- 1.02 The purpose of our visit was to carry out an investigation into the subsoil conditions in order to assess the suitability of the site for the development of small basement areas in front of the existing building.
- 1.03 The comments and opinions expressed are based purely on the conditions encountered and the subsequent laboratory testing. The locations of the excavations have been assessed on site.
- 1.04 Some special condition may be present on site that, to date, has not been encountered within the scope of the site investigation works and therefore will not have been taken into account within this report.
- 1.05 All ground water recordings or their absence relate to short term observations and do not allow for fluctuations due to seasonal or other effects.

SECTION 2 DESCRIPTION OF SITE

- 2.01 The site is formed by an existing large structure with front driveway area.
- 2.02 The site is surrounded by residential housing and commercial shops.

SECTION 3 FIELDWORK

- 3.01 In order to assess the site, the proposals have been made to assess both the shallow and deeper soils profiles in order to enable the design of potentially traditional foundations or piled foundations should this option become unviable. In order to complete these works, the following site investigation works were implemented.

- 2No dynamic competitor rig boreholes sunk immediately outside the footprint of the proposed structure in order to assess soils and install standpipes for the purpose of groundwater monitoring. The depth of these boreholes were identified as 6.00 metres. The date of these works was recorded as 18th July 2022.
- Installation of 2No 6 meter standpipes which included 5 metres of slotted pipework in the lower geology and a solid. The standpipe was sealed at the surface with a Bentonite seal.

3.02 The location of these works is indicated on the site plan-forming appendix one.

3.03 The various strata encountered were noted and are recorded on the borehole logs forming appendix two.

SECTION 4 **SITE INFORMATION**

401 The site has been reviewed and we can confirm that the geology within the site is as follows :-

Table 1 **Geological Profile**

Stratum	Description	Depth, Range	Thickness, Range
MADE GROUND	Brown clayey SAND with coarse limestone gravel.		
	Brown silty sandy FILL with fragments of brick, and concrete, slightly claybound		
LONDON CLAY	Firm becoming stiff orange brown moderately silty, slightly sandy CLAY		

Ground Water : NO GROUNDWATER HAS BEEN IDENTIFIED WITHIN THE SCOPE OF THE DRILLING WORKS.

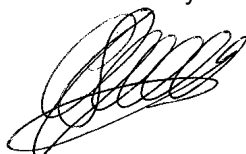
SECTION 6 **RESULTS**

6.01 In order to assess the soil conditions and possible groundwater impact of the proposed development on groundwater regime underlying the site, two separate monitoring inspections were undertaken. Originally a single period of monitoring was proposed, although, this revealed no obvious groundwater presence and as such, a further inspection was undertaken. Details of this are as follows :-

- 18th July 2022 – WS1 – Dry.
 WS2 – Dry.
- 25th July 2022 – WS1 – 4.56 metres below G.L.
 WS2 – 5.03 metres below G.L.
- 2nd August 2022 – WS1 – 4.58 metres below G.L.
 WS2 – 4.93 metres below G.L.

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

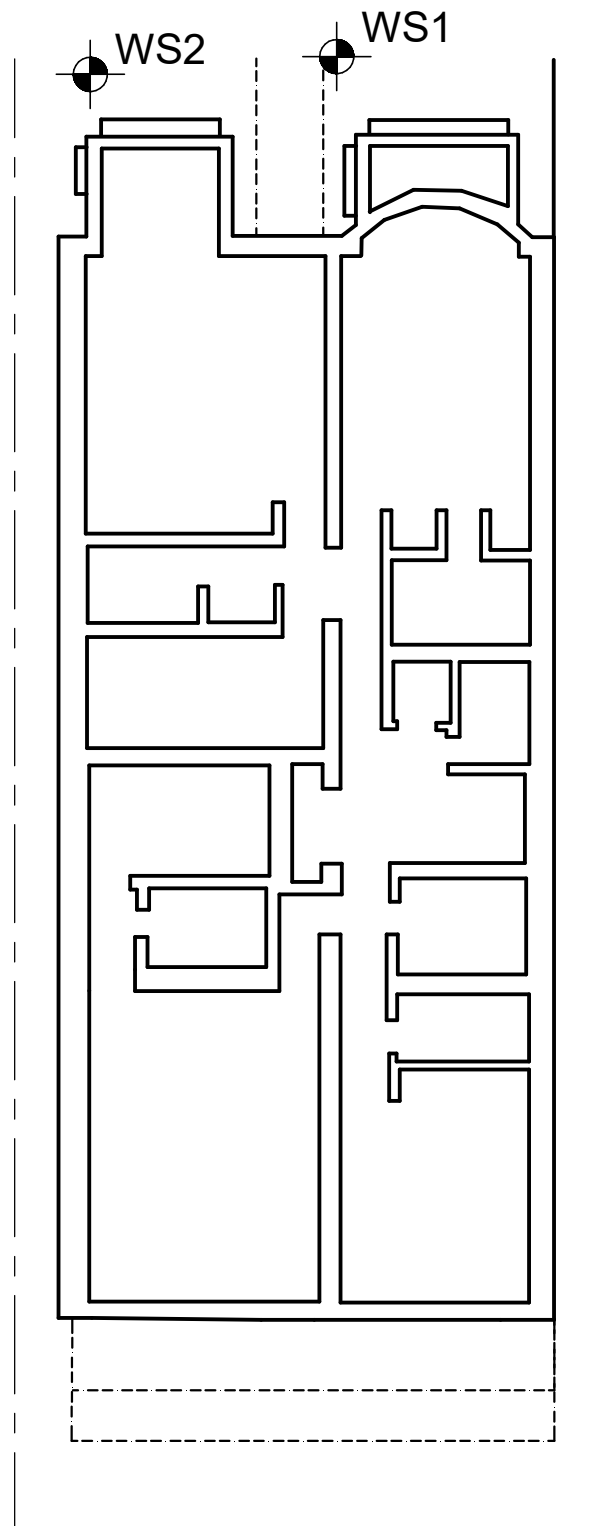
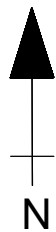


C.S.Gray M.Sc
Contract Engineer

HESI

9 Bracknell Gardens, London, NW3 7EE

Existing Site Plan



Bracknell Gardens, (9), London, NW3 7EE


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)				
MADE GROUND: Brown clayey SAND with coarse limestone gravel.		0.70	0.70		1	U	GL - 1.00				
Firm becoming stiff orange brown moderately silty, slightly sandy CLAY			5.30		2	U	1.00-2.00				1.00
					3	U	2.00-3.00				
					4	U	3.00-4.00				
					5	U	4.00-5.00				
					6	U	5.00-6.00				
Borehole closed at 6.00m		6.00									

Remarks

Scale 1 : 50

 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)

Bracknell Gardens, (9), London, NW3 7EE

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)				
Block Paving (0.05m) over Sand (0.15m) over Concrete		0.40	0.40		1	U	GL - 1.00				
MADE GROUND : Brown silty sandy FILL with fragments of brick, and concrete, slightly claybound		1.40	1.00		2	U	1.00- 2.00				1.00
Firm becoming stiff orange brown moderately silty, slightly sandy CLAY			4.60		3	U	2.00- 3.00				
					4	U	3.00- 4.00				
					5	U	4.00- 5.00				
					6	U	5.00- 6.00				
Borehole closed at 6.00m		6.00									

Remarks

Scale 1 : 50

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