Appendix C

Site reconnaissance photographs

Record of Site Visit

ARUP

Project title	Haverstock Hill			**Job number** 268265
Visit made by	TM	**Place visited**	5-17 Haverstock Hill	**File reference**
Copy to		**Person visited**		**Date of visit** 07/08/20
Purpose of visit	Geo-Environmental Site Walkover			

The site is located in an area of mixed retail, residential and office use in Camden. The site is bordered by Chalk Farm underground station to the east, Haverstock Hill to the north, Adelaide Road to the south and Eton Place to the west. The site is comprised of a main six storey building and includes six retail units on Adelaide Road and an external access yard and lane in the west which provides vehicle access from Haverstock Hill or Adelaide Road. The main building includes a lower parking level which is at a slightly reduced level compared to ground level. Photos and the location they were taken are shown on the attached photo plan.

The site was previously occupied by squatters and all external access doors and windows at ground level have been sealed apart from a single entrance from the yard. This leads to the reception/security office. The ground floor level includes a number of store and office rooms and a central garage area accessed via a ramp from shutters at ground level.

The stores and office rooms were typically empty apart from waste left from previous occupation by squatters. Little plant was observed on the ground level apart from external air conditioning units on the western wall of the building, an electric air compressor and sprinkler pipes in the garage area and an electric hot water tank in a toilet area in the east of the site.

An electric plant room is present in the north of the site, but access is via an external door which had been sealed. A room labelled ‘chemical store’ in the toilet area in the east if the site was also locked and not accessible. A sprinkler valve room is present on the north western boundary but had a sign on the door warning of asbestos materials inside and was locked and not accessible. Access was also not possible to the retail units on Adelaide Road. Four units were boarded up while two had metal security shutters which were padlocked and not accessible. Access to an external corridor to the side of the units was possible but site security advised they didn’t have a key to the door to the rear access corridor. Inaccessible areas are shown in yellow on the attached access plan.

Three manhole covers within the garage area appeared to be linked to drainage and may have provided access to an interceptor tank. Three manhole covers in the external yard may be linked to previous refuelling activities onsite although no infrastructure associated with refuelling such as pumps or refill points were observed. A possible vent pipe was located on the outside wall of the sprinkler valve room. The external yard is also the location of a car lift, which is not currently accessible due to safety concerns about the building structure. A large crack was observed in an external wall. The car lift inside was still in place and located above ground.

Three boreholes with standpipe installations from a previous ground investigation were located. BH06 is present beneath a bolted flush cover in the lower garage area and the standpipe inside was sealed with a gripper/screw cap. BH01 and BH02 are located in the external yard beneath plastic flip top covers and the standpipe inside was covered with duct tape.

Record of Site Visit

Notes	Photos
Possible tanks Three manhole covers are present in the external yard in the west of the site next to a car lift.	
Electric plant room. An electric plant room is present on the north western side of the building. Due to previous squatters who occupied the building all external doors apart from one have been sealed. Access to the plant room was not possible during the visit.	
Retail units Four of the six units are boarded up. Two have metal security shutters which are padlocked. The units are linked by a rear access corridor. The door to this corridor was locked and access to the retail units was not possible during the visit.	

Record of Site Visit

Possible chemical store A store room with a chemicals sign on the door is present in the east of the building. The door was locked and access was not possible during the site visit.	
Air compressor An air compressor is present on the lower car park level.	
Manhole covers – car park lower level Plans from a previous ground investigation suggest these are related to an interceptor tank.	

Record of Site Visit

Hot water tank A hot water tank is present in a store cupboard in the toilets in the east of the building.	

Access plan

5-17 Haverstock Hill

- Inaccessible areas
- Accessible areas

Appendix D

Regulatory information

From: Priddle, Nick
To: Oliver Gernon
Subject: [External] RE: Contaminated Land Enquiry (Ref: 21607217) Haverstock Hill
Date: 25 August 2020 16:30:50
Attachments:

PDF Report - 4 Adelaide Rd, NW3 2BN.pdf
Search Results - 4 Adelaide Rd, NW3 2BN.xlsx

Hi Oliver

Contaminated Land Enquiry Land @ 4 Adelaide Road Chalk Farm, NW3 2BN

As part of your enquiry the following searches were undertaken using GIS software (Mapinfo Pro) and other databases to identify the potential for land contamination due to past and present land use activities within a 100m radius of the subject site. The search radius was expanded for landfill sites and private water supplies as explained below :

- Businesses registered with Kelly's Trade Directory.
- Historical land use activities.
- Pollution Incidents - none
- Elevated levels of heavy metals in soils - none.
- Landfill sites within 250m radius - none.
- Part A2/B Industrial Process – none
- Private waters supplies within 2km – none
- Part 2A determinations - none

The results (see pdf and spreadsheet attached) identified the following former industrial land use activities of plausible concern within 100m:

- Coal and coke merchants, motor garage repairs, plumbing and sanitary engineers, numerous plots of railway land, unspecified works, garages and coal depot.

According to our contaminated land risk characterisation, land on which the above processes/activities were carried out is considered to represent a moderate risk of contamination (risk score 12). It is considered likely that such land could exhibit significantly elevated contaminate levels with the potential to cause harm, although the Council has no present evidence that confirms that there are contamination issues affecting the site other than potentially contaminative land-use activities in proximity. The subject site has not been identified for inspection or is it being investigated under Part 2A of the Contaminated Land Regime as it is considered suitable for its current use. Neither has the subject site been determined as Contaminated Land under Part 2A of EPA 1990. If the site was to be redeveloped in the future involving ground disturbance, excavation works or soft landscaping (certain soils in Camden contain elevated levels of the heavy metal lead) then a planning condition would be imposed requiring a detailed site investigation (desk top study, walkover survey and intrusive investigation) and if

necessary remediation works. The investigation process follows a risk based approach in accordance with Part 2A, objectively to ensure that potentially contaminated land is suitable for its proposed use. Consequently, the planning process is the main way in which contaminated land and potentially contaminated land is investigated and remediated in Camden.

Disclaimer:

The above response is provided from such information that is readily available to the Council and in its possession. It is believed to be correct but the Council expressly gives no warranty in this respect nor will the Council accept any liability whatsoever for any error, omission or loss occasioned thereby to any person (whether or not the person requested the information) and in particular the Council gives no warranty that it has researched all its relevant archives in order to respond to the request for information.

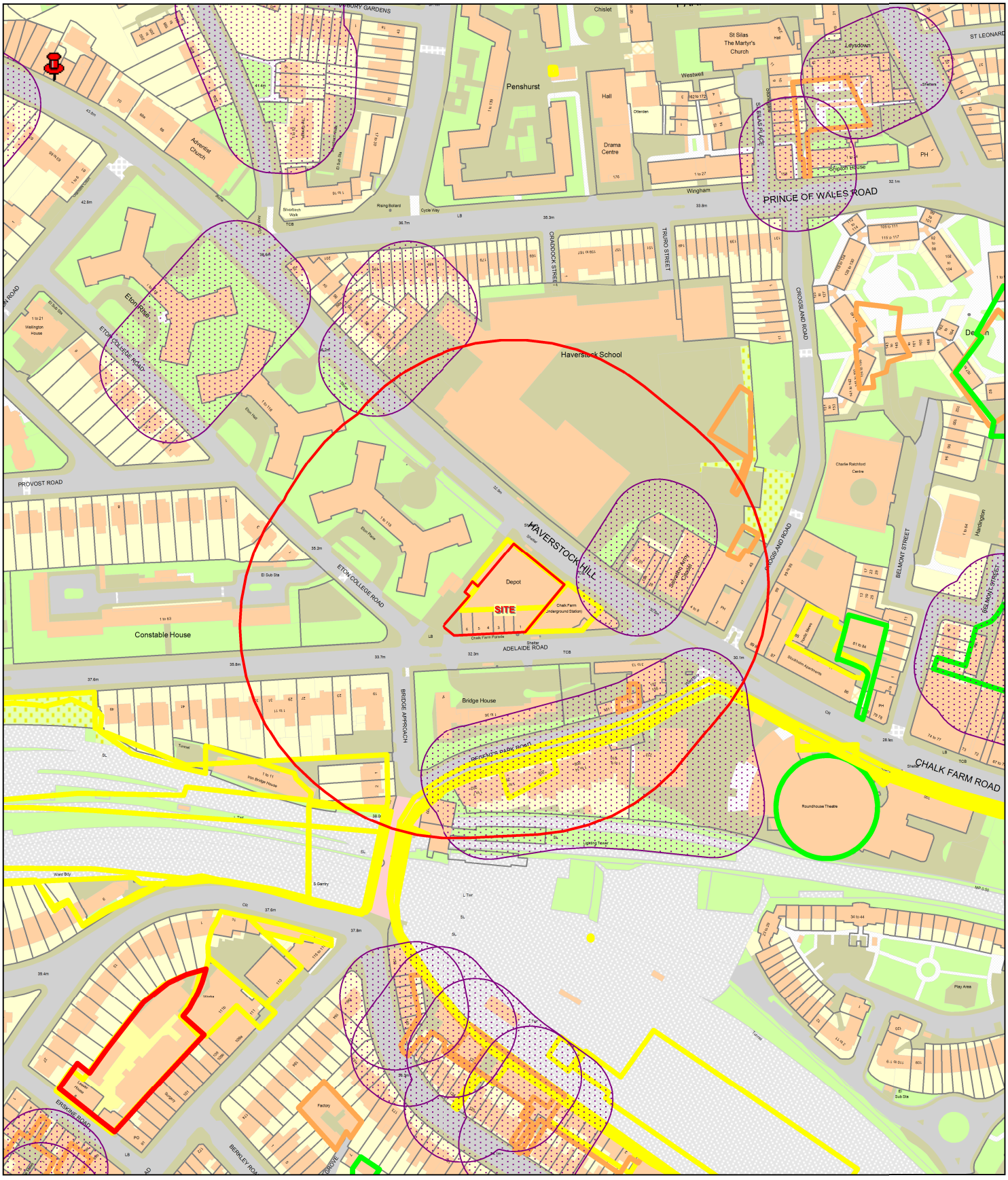
If you require clarification on aspect of the above please feel free to contact me.

Best regards

Nick Priddle
Technical Officer Contaminated Land & Noise

Telephone: 0207 974 4054

Contaminated Land Enquiry: 4 Adelaide Rd, Chalk Farm, NW3 2BN



LUHistGeom - Source Risk

- 15 to 27 (119)
- 11 to 14 (641)
- 5 to 10 (785)
- 0 to 4 (374)

HistLandfillSite250mBuffer

Pollution Incident

Part B Sites

Heavy Metals B/G Surv

Kellys Data Buffer25m

HistoricLandfillSite

Camden

Table 1: Trade Directory Search

UID	Desc	SiteType	Date	OldRoadName	OldRoadNumber
864	1923 to 1961: Coal & Coke Merchants	Coal & Coke Merchants	1923 to 1961	Chalk Farm Station	
560	1951: Motor Garage Repairs	Motor Garage Repairs	1951	Haverstock Hill	50
1294	1970: Plumbing / Sanitary Engineers	Plumbing / Sanitary Engineers	1970	Haverstock Hill	20

Table 2: OS Land Use Search

UID	UID_Landmark	Desc	dictedSeverity	PredictedPresence_EI	SourceRisk	X	Y
1854	200279918	1952-1955: Railway land	3	3	9	528356.1	184026.3
445	200282477	1934-1939: Unknown Industria	3	4	12	528207.3	184498
1463	200281531	1965-1971: Railway land	3	3	9	528356.1	184024.7
183	200272848	1952-1971: Garages	3	3	9	528100.7	184432.3
857	200279694	1952-1955: Works	4	3	12	528213.9	184448
1789	200276272	1871-1877: Railway Lands	3	3	9	528667.4	184406.7
259	200281438	1965-1971: Railway land	3	3	9	528020.1	184292.6
468	200279805	1952-1955: Coal depot	3	3	9	528108	184333.9
1827	200277561	1894-1896: Railway Lands	3	3	9	528667.4	184406.4
1856	200292642	1909-1922: Railway Lands	3	3	9	528666.4	184410.4
1851	200282672	1934-1939: Railway Lands	3	3	9	528666.4	184410.4
625	200281362	1955-1971: Chalk Farm Station	3	3	9	528125.5	184416.1
1115	200279693	1952-1975: Works	4	3	12	528157.4	184371.6

Appendix E

GEA 2016 Ground investigation

E1 Borehole location plan

GEA Geotechnical & Environmental Associates

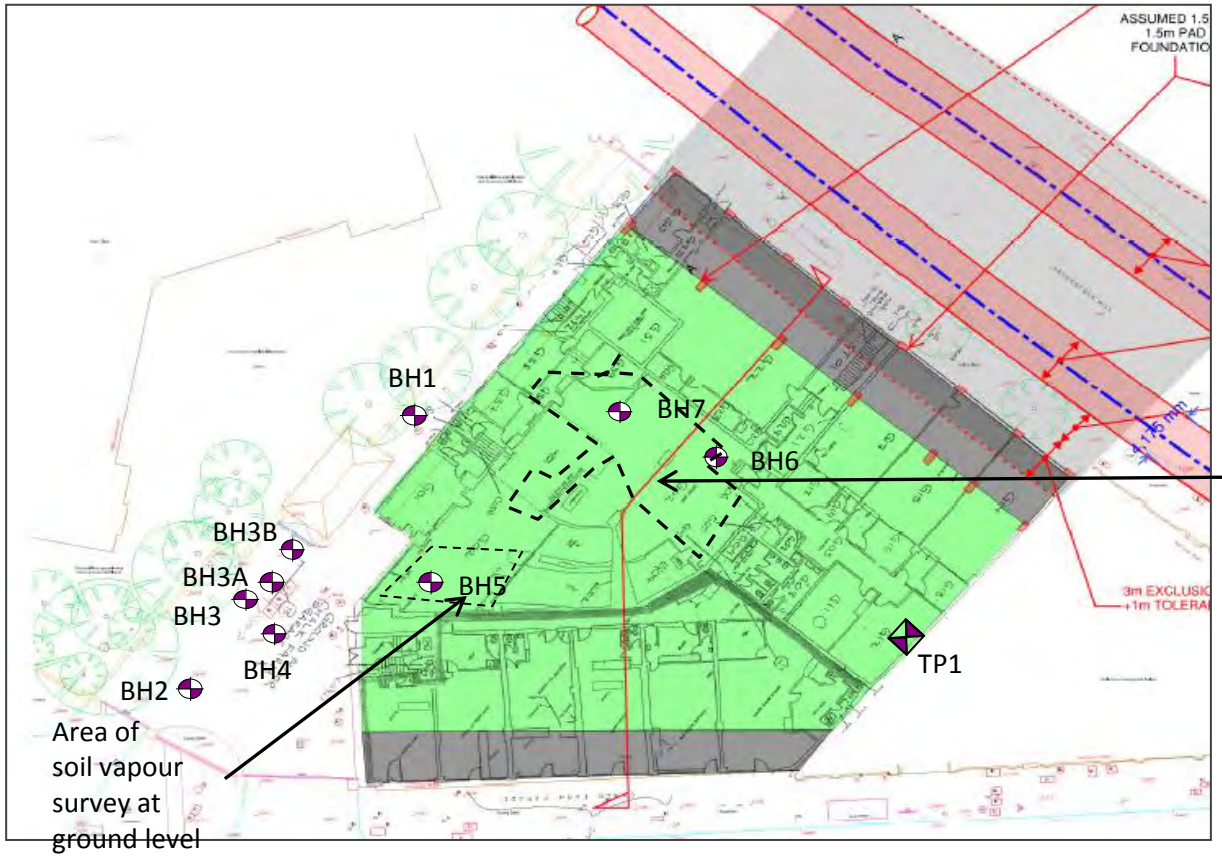
Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Site Plan

Site	5-17 Haverstock Hill, London, NW3 2BL
Client	Mark Steinberg
Engineer	Conisbee

Job Number J15316

Sheet 1 / 1



E2 Borehole logs

Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Borehole Number** **BH 1**

Boring Method	**Casing Diameter**	**Ground Level (mOD)**	**Client**	**Job Number**
Cable Percussion	150mm cased to 3.00m		Mark Steinberg	J15316
	Location	**Dates** 02/12/2015	**Engineer** Conisbee	**Sheet** 1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(0.05)	Tarmac		
						0.05			
						(0.15)	Reinforced concrete		
						0.20			
0.60	D						MADE GROUND (brown clay with rare orange-brown partings of sand and silt, half bricks, charcoal, concrete and roots. Rare medium to coarse subangular flint gravel noted from a depth of 2.00 m)		
1.20-1.65	CPT N=7	1.20	DRY	1,1/2,1,2,2		(2.40)			
1.20-1.65	B								
1.80	D								
2.00-2.45	CPT N=15	2.00	DRY	2,3/5,5,3,2					
2.00-2.45	B								
						2.60			
2.70	D						Firm becoming stiff fissured high strength brown mottled grey silty CLAY with abundant selenite crystals, rare occasional partings of orange-brown fine sand and silt. Dead rootlets noted to a depth of 3.00 m. Claystone encountered at a depth of 3.50 m. Rare carbonaceous material noted from a depth of 5.00 m		
3.00-3.45	U								
3.50	D								
3.80	D								
4.00-4.45	SPT N=15	3.00	DRY	2,3/3,3,4,5					
4.00-4.45	D								
4.70	D								
5.00-5.45	U								
5.50	D								
6.00-6.45	SPT N=18	3.00	DRY	3,3/4,4,5,5		(7.00)			
6.00	D								
7.50-7.95	U								
8.00	D								
9.00-9.45	SPT N=21	3.00	DRY	4,5/5,5,5,6					
9.00	D								
						9.60			
9.90	D						Stiff becoming very stiff fissured high strength becoming extremely high strength grey silty CLAY with rare grey burrows, specklings of mica and black specks. Claystones		

Remarks
Hand-dug service pit to a depth of 1.20 m (60 minutes)
Chiselling from 10.20 m and 10.30 m (30 minutes) and 17.60 m to 17.80 m (30 minutes)
Standpipe installed to a depth of 6.0 m
Groundwater measured at a depth of 2..08 m on 18/12/2015 and 2.05 m on 13/01/2016

Scale (approx)	**Logged By**
1:50	HD

Figure No.
J15316.BH 1

Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Borehole Number** **BH 1**

Boring Method	**Casing Diameter**	**Ground Level (mOD)**	**Client**	**Job Number**
Cable Percussion	150mm cased to 3.00m		Mark Steinberg	J15316
	Location	**Dates** 02/12/2015	**Engineer** Conisbee	**Sheet** 2/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
							encountered at depths of 10.20 m, 17.60 m and 24.60 m		
10.30	D								
10.50-10.95	U								
11.00	D								
12.00-12.45 12.00	SPT N=23 D	3.00	DRY	5,5/5,5,6,7					
13.50-13.95	U								
14.00	D								
15.00-15.45 15.00	SPT N=26 D	3.00	DRY	6,6/6,6,7,7					
16.50-16.95	U								
17.00	D					(15.10)			
17.80	D								
18.00-18.45 18.00	SPT N=35 D	3.00	DRY	6,7/8,8,9,10					
19.50-19.95	U								

Remarks

Scale (approx)	**Logged By**
1:50	HD

Figure No.
J15316.BH 1

Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Borehole Number** **BH 1**

Boring Method	**Casing Diameter**	**Ground Level (mOD)**	**Client**	**Job Number**
Cable Percussion	150mm cased to 3.00m		Mark Steinberg	J15316
	Location	**Dates** 02/12/2015	**Engineer** Conisbee	**Sheet** 3/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
20.00	D								
21.00-21.45 21.00	SPT N=45 D	3.00	DRY	7,8/9,11,12,13		(15.10)			
22.50-22.95	U								
23.00	D								
24.50-24.73 24.50	SPT 32/75 D	3.00	DRY	9,10/32		24.70	Complete at 24.70m		

Remarks	**Scale (approx)**	**Logged By**
	1:50	HD
	Figure No.	J15316.BH 1

GEA Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Borehole Number** **BH 2**

Boring Method	**Casing Diameter**	**Ground Level (mOD)**	**Client**	**Job Number**
Cable Percussion	150mm cased to 3.00m		Mark Steinberg	J15316
	Location	**Dates** 03/12/2015	**Engineer** Conisbee	**Sheet** 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(0.05) 0.05	Tarmac		
						(0.20) 0.25	Reinforced concrete		
0.60	D1						MADE GROUND (brown mottled greyish brown silty sandy clay with fine to coarse subangular to rounded flint, brick, ash, coal and rootlets. Concrete encountered between 2.50 m and 2.60 m)		
1.20-1.65 1.20-1.65	CPT N=5 B2	1.20	DRY	1,0/1,1,2,2,1		(2.35)			
2.00-2.45 2.00-2.45	CPT N=3 B3	2.00	DRY	1,0/0,1,1,1					
				Seepage(1) at 2.50m, sealed at 3.00m.		2.60			▽1
2.80	D4						Firm becoming stiff fissured high strength and very high strength brown mottled grey silty CLAY with rare partings of orange-brown fine sand and silt, selenite crystals. Rare carbonaceous material noted from a depth of 4.00 m. Claystone encountered at a depth of 3.80 m. Dead rootlets noted at a depth of 4.80 m		
3.00-3.45 3.00	SPT N=8 D5	3.00	DRY	1,1/1,2,2,3					
3.60 3.80	D6 D7								
4.00-4.45	U8								
4.50	D9								
4.80	D10								
5.00-5.45 5.00	SPT N=14 D11	3.00	DRY	2,3/3,3,4,4					
6.00-6.45	U12					(7.20)			
6.50	D13								
7.50-7.95 7.50	SPT N=16 D14	3.00	DRY	3,3/3,4,4,5					
9.00-9.45	U15								
9.50	D16								
						9.80	Stiff becoming very stiff fissured high strength and very high		

Remarks
Hand-dug service pit to a depth of 1.20 m
Standpipe installed to a depth of 6.00 m
Groundwater measured at depths of 1.88 m on 18/12/2015 and 1.87 m on 13/01/2016

Scale (approx)	**Logged By**
1:50	HD

Figure No.
J15316.BH 2

GEA Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Borehole Number** **BH 2**

Boring Method	**Casing Diameter**	**Ground Level (mOD)**	**Client**	**Job Number**
Cable Percussion	150mm cased to 3.00m		Mark Steinberg	J15316
	Location	**Dates** 03/12/2015	**Engineer** Conisbee	**Sheet** 2/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00	D17						strength silty CLAY with rare shell fragments. Rare partings of grey fine sand and silt. Pyrite nodule noted at a depth of 14.50 m		
10.50-10.95 10.50	SPT N=23 D18	3.00	DRY	4,4/5,5,6,7					
12.00-12.45	U19								
12.50	D20					(5.20)			
13.50-13.95 13.50	SPT N=26 D21	3.00	DRY	5,5/6,6,7,7					
14.50-14.95	U22								
15.00	D23					15.00	Complete at 15.00m		

Remarks

Scale (approx)	**Logged By**
1:50	HD

Figure No.
J15316.BH 2

GEA Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL		**Number** **BH 3**
Excavation Method Hand-dug service pit	**Dimensions**	**Ground Level (mOD)**	**Client** Mark Steinberg	**Job Number** J15316
	Location	**Dates** 24/11/2015	**Engineer** Conisbee	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.08)	Tarmac		
					0.08			
					(0.08)	Concrete. At a depth of 0.08 m, exposed 50 mm of metal on side of pit. Borehole terminated and relocated 1 m		
					0.16	Complete at 0.14m		

Remarks	Scale (approx)	Logged By
	1:50	HD
	Figure No. J15316.BH 3	

GEA Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL		**Number** **BH 3A**
Excavation Method Hand-dug service pit	**Dimensions**	**Ground Level (mOD)**	**Client** Mark Steinberg	**Job Number** J15316
	Location	**Dates** 24/11/2015	**Engineer** Conisbee	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.40	D1				(0.06) 0.06	Tarmac		
					(0.13) 0.19	Concrete		
					(0.07) 0.26	Concrete		
					(0.08) 0.34	Concrete with metal mesh on underside of concrete at a depth of 0.34 m		
					(0.22) 0.56	MADE GROUND (orange-brown sand with fragments of brick, metal and charcoal. At a depth of 0.56 m rusty metal encountered at base of pit)		
						Complete at 0.56m		

Remarks	**Scale (approx)** 1:50	**Logged By** HD
	Figure No. J15316.BH 3A	

Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Number** **BH3B**

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Client**	**Job Number**
Open-drive sampler			Mark Steinberg	J15316
	Location	**Dates** 24/11/2015	**Engineer** Conisbee	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.07) 0.07	Tarmac		
					(0.53)	Reinforced concrete (rebar at a depth of 0.35 m)		
					0.60 (0.30)	MADE GROUND (brown sand with fragments of concrete and brick. Rootlets at a depth of 0.60 m)		
0.80	D1				0.90	MADE GROUND (no recovery - concrete pushed down in core barrel)		
					(1.10)			
2.00	D2		(PP) over 4.50		2.00 (0.30)	'Stiff' brown mottled grey silty fissured CLAY with occasional partings of orange-brown fine sand and silt and rare selenite crystals. Fine rootlet at 2.20 m - desiccated soil		
2.10	D3							
2.30	D4		(PP) 3.25		2.30	Firm brown mottled grey silty fissured CLAY with occasional partings of orange-brown fine sand and silt and rare selenite crystals		
2.60	D5		(PP) 2.75		(0.70)			
2.90	D6		(PP) 3.00		3.00	Stiff brown mottled grey silty fissured CLAY with occasional partings of orange-brown fine sand and silt and rare selenite crystals. Claystone encountered at a depth of 3.43 m to 3.50 m		▽1
3.00	D7							
3.20	D8		(PP) 3.00 Seepage(1) at 3.43m.		(1.00)			
3.50	D9		(PP) 3.00					
3.80	D10		(PP) 3.00					
4.00	D11		(PP) 3.00		4.00	Complete at 4.00m		

Remarks	**Scale (approx)**	**Logged By**
	1:50	HD
	Figure No.	J15316.BH3B

Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Number** **BH 4**

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Client**	**Job Number**
Open-drive sampler			Mark Steinberg	J15316
	Location	**Dates** 24/11/2015	**Engineer** Conisbee	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.09)	Tarmac		
					0.09			
					(0.12)	Reinforced concrete with rebar at a depth of 0.20 m (5 mm diameter)		
					0.21			
					(0.12)	Concrete		
0.60	D1				0.33			
					(0.67)	MADE GROUND (orange-brown silty sandy clay with medium rounded flint gravel and brick fragments)		
					1.00			
					(0.50)	Soft brown mottled grey silty fissured CLAY. Claystones encountered between 1.20 m and 1.60 m		
1.50	D2		(PP) 1.50		1.50			
1.60	D3					Firm brown mottled grey silty fissured CLAY. Rootlets noted to a depth of 2.10 m and dead rootlets noted at a depth of 2.60 m. Claystone encountered at a depth of 4.00 m		
1.80	D4		(PP) 2.00					
2.10	D5		(PP) 2.50					
2.40	D6		(PP) 2.50					
2.60	D7				(2.50)			
2.70	D8		(PP) 2.50					
3.00	D9		(PP) 3.50					
3.30	D10		(PP) 2.25					
3.60	D11		(PP) 2.50					
3.90	D12		(PP) 3.75					
4.00	D13				4.00	Stiff brown mottled grey silty fissured CLAY.		
			(PP) 2.50					
4.50	D14		(PP) 3.00		(1.20)			
			(PP) 3.25					
5.00	D15				5.20			
			(PP) 3.75			Complete at 5.20m		

Remarks

Scale (approx)	**Logged By**
1:50	HD

Figure No.
J15316.BH 4

Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Number** **BH 5**

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Client**	**Job Number**
Open-drive sampler			Mark Steinberg	J15316
	Location	**Dates** 25/11/2015	**Engineer** Conisbee	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.04)	Screed		
					0.04			
					(0.12)	Concrete		
					0.16			
					(0.34)	MADE GROUND (brick with sand and gravel)		
0.60	D1				0.50			
0.80	D2				(0.30)	MADE GROUND (brown silty sandy clay with rare medium well rounded flint, concrete fragments, fine rootlets and decayed wood. Brick fragments encountered at a depth of 0.80 m)		
1.00	D3		(PP) 1.50		0.80			
1.30	D4		(PP) 3.00			Stiff brown mottled grey silty fissured CLAY with occasional partings of orange-brown fine sand and silt and selenite crystals. Root fibres noted to a depth of 2.10 m - possibly desiccated soil?		
					(1.50)			
1.60	D5		(PP) 3.50					
1.80	D6							
1.90	D7		(PP) 3.00					
2.20	D8		(PP) 2.25		2.30			
2.50	D9		(PP) 2.50			Firm brown mottled grey silty fissured CLAY		
2.60	D10							
2.80	D11		(PP) 2.50		(1.00)			
3.00	D12							
			(PP) 3.00					
			(PP) 3.50		3.30			
					(0.20)	Stiff brown mottled grey silty fissured CLAY		
3.60	D13				3.50			
			(PP) 3.50			Stiff brownish grey silty fissured CLAY		
3.90	D14				(0.50)			
4.00	D15		(PP) 3.75		4.00			
						Complete at 4.00m		

Remarks	**Scale (approx)**	**Logged By**
	1:50	HD
	Figure No.	
	J15316.BH 5	

GEA Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL		**Number** **BH 6**
Excavation Method Open-drive sampler	**Dimensions**	**Ground Level (mOD)**	**Client** Mark Steinberg	**Job Number** J15316
	Location	**Dates** 25/11/2015	**Engineer** Conisbee	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.05)	Screed		
					0.05			
0.30	D1				(0.10)	Concrete overlying cobbly gravel with brick fragments		
					0.15			
					(0.30)	Soft dark grey mottled black silty sandy CLAY with decayed wood - organic odour		
0.60	D2		(PP) 1.50		0.45			
			(PP) 1.50			Firm brown mottled grey silty fissured CLAY with abundant selenite crystals		
1.00	D3		(PP) 1.75					
1.00-1.45	SPT N=9		1,1/2,2,2,3					
1.30	D4		(PP) 2.50		(1.75)			
1.60	D5		(PP) 2.50					
			(PP) 2.25					
2.00-2.45	SPT N=22		2,9/10,5,4,3					
2.00	D6		(PP) 2.50		2.20			
2.30	D7					Stiff brown mottled grey silty fissured CLAY with abundant selenite crystals		
			(PP) 2.75					
2.50	D8							
2.60	D9							
			(PP) 3.00					
2.90	D10							
			(PP) 3.25					
3.00-3.45	SPT N=16		2,2/3,4,4,5					
3.20	D11		(PP) 3.50					
3.50	D12				(2.80)			
			(PP) 3.50					
3.90	D13							
4.00-4.45	SPT N=18		3,3/3,4,5,6					
4.00	D14							
			(PP) over 4.50					
4.50	D15							
					5.00			
5.00-5.45	SPT N=19		3,3/4,4,5,6			Stiff brownish grey silty fissured CLAY. Dead roolets at 4.00 m		
5.00	D16							
5.50	D17							
6.00-6.45	SPT N=19		3,3/4,4,5,6					
6.00	D18							
					(3.30)			
7.00-7.45	SPT N=21		3,4/4,5,6,6					
8.00-8.45	SPT N=24		3,5/5,5,7,7					
					8.30			
						Stiff grey silty fissured CLAY with rare orange-brown silt and fine sand		
9.00-9.45	SPT N=25		4,5/5,6,6,8					
					(1.70)			
					10.00			

Remarks
Standpipe installed to a depth of 6.00 m
Standpipe recorded to be dry on 18/12/2015 and groundwater measured at a depth of 3.72 m on 13/01/2016

Scale (approx)	**Logged By**
1:50	HD

Figure No.
J15316.BH 6

Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware,Herts SG12 7QE	**Site** 5 - 17 Haverstock Hill, London NW3 2BL	**Number** **BH 7**

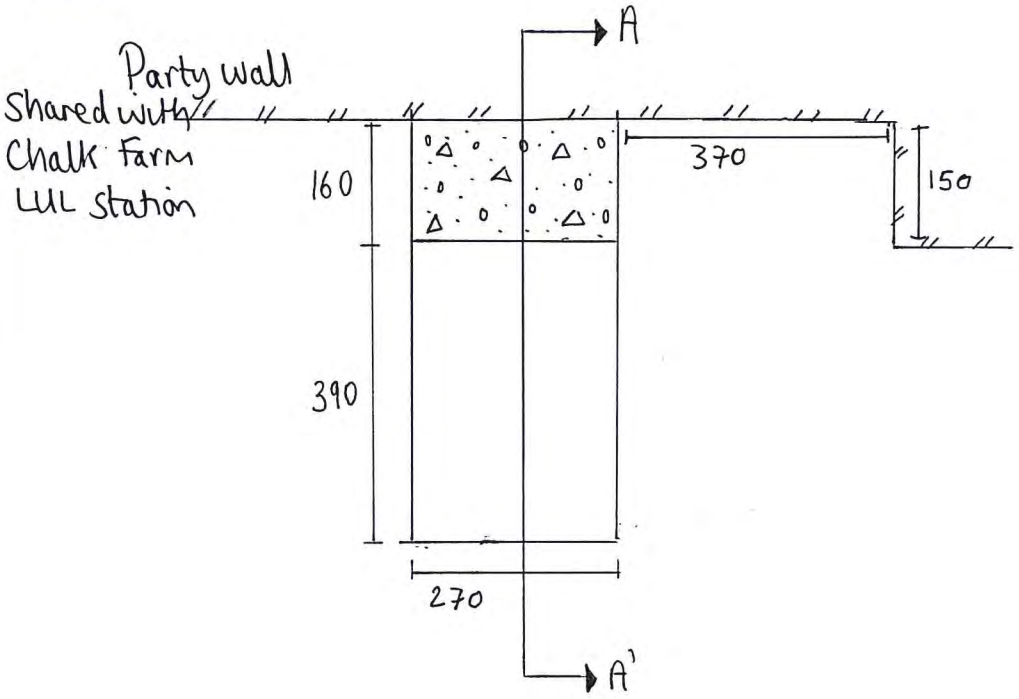
Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Client**	**Job Number**
Open-drive sampler			Mark Steinberg	J15316
	Location	**Dates** 26/11/2015	**Engineer** Conisbee	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.04)	Screed		
					0.04			
					(0.15)	Concrete		
0.40	D1		(PP) 0.75		0.19	Soft becoming firm brown mottled grey silty CLAY		
0.50	D2		(PP) 1.00					
0.80	D3		(PP) 2.50					
					(1.81)			
1.10	D4		(PP) 2.25					
1.40	D5							
1.50	D6		(PP) 2.25					
1.70	D7		(PP) 2.75					
2.00	D8				2.00			
2.30	D9		(PP) 3.00			Stiff brown mottled grey silty fissured CLAY with occasional partings of orange-brown fine sand and silt and selenite crystals. Decayed rootlets noted to a depth of 2.60 m		
			(PP) 3.50		(1.00)			
2.60	D10							
2.90	D11		(PP) 3.50					
3.00	D12		(PP) 3.50		3.00			
						Complete at 3.00m		

Remarks	**Scale (approx)**	**Logged By**
	1:50	HD
	Figure No.	
	J15316.BH 7	

GEA Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware Herts SG12 7QE	**Site** 5-17 Haverstock Hill, London, NW3 2BL	**Trial Pit Number** 1
Excavation Method Manual	**Dimensions** 270 x 550 x 1200 (mm)	**Ground Level (mOD)**	**Client** Mark Steinberg	**Job Number** J15316
	Location Room G12	**Dates** 26/11/2015	**Engineer** Conisbee	**Sheet** 1 / 3

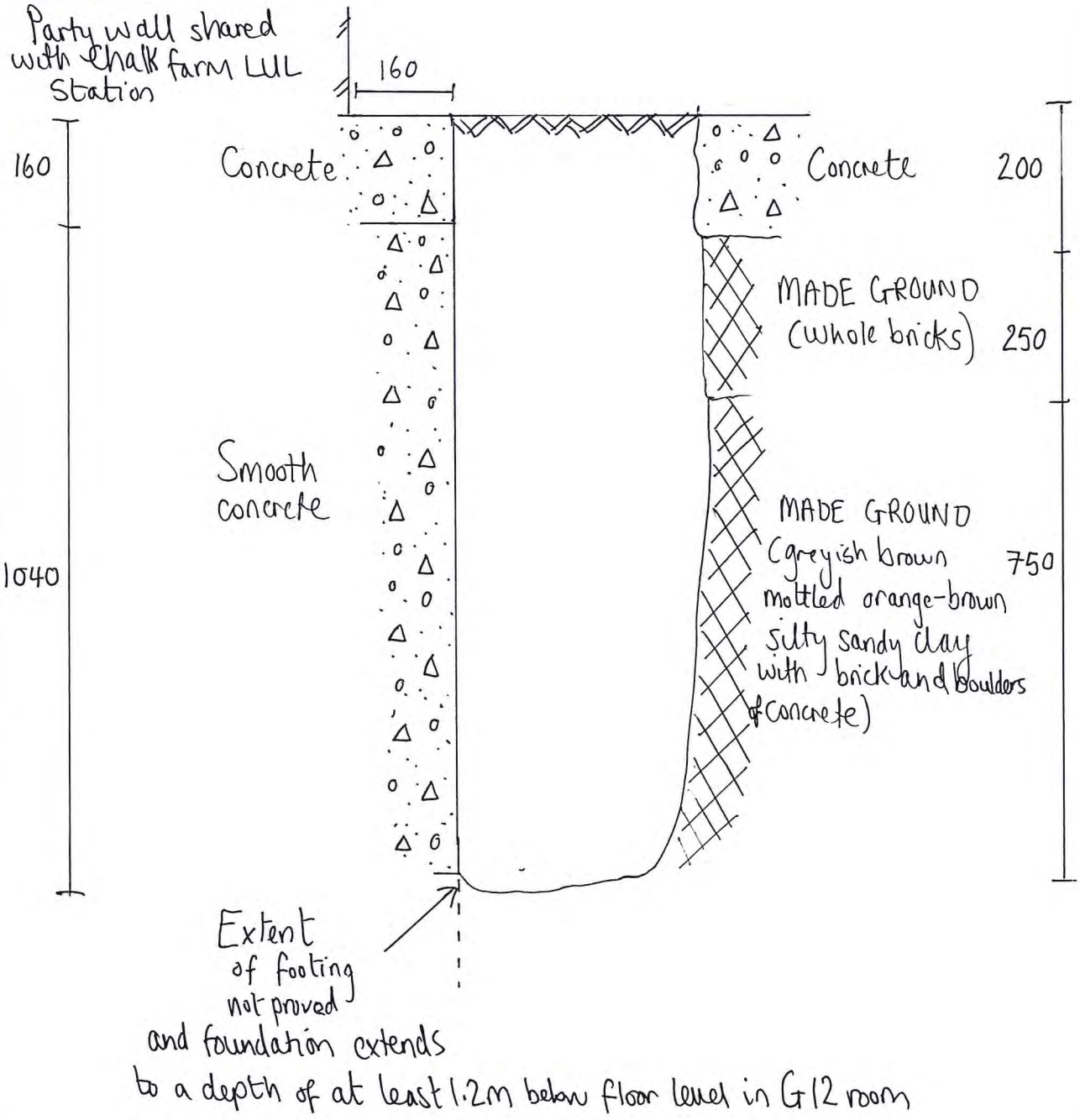
PLAN



Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Perched water enocuntered at the base of the pit, standing at a depth of 0.98 m on completion	HD

GEA Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware Herts SG12 7QE	**Site** 5-17 Haverstock Hill, London, NW3 2BL	**Trial Pit Number** 1
Excavation Method Manual	**Dimensions** 270 x 550 x 1200 (mm)	**Ground Level (mOD)**	**Client** Mark Steinberg	**Job Number** J15316
	Location Room G12	**Dates** 26/11/2015	**Engineer** Conisbee	**Sheet** 2 / 3

SECTION A - A'



Remarks:	Scale:
All dimensions in millimetres	1:10
Sides of trial pit remained stable during excavation	Logged by:
Groundwater: Perched water enocuntered at the base of the pit, standing at a depth of 0.98 m on completion	HD

Geotechnical & Environmental Associates
Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Trial Pit No 1

Site	5-17 Haverstock Hill, London, NW3 2BL
Client	Mark Steinberg
Engineer	Conisbee

Job Number J15316

Sheet 3/3

E3 Soil testing certificates

Chemtest
The right chemistry to deliver results

Results - Soil

Project: J15316 - Haverstock Hill

Client: GEA				Chemtest Job No.:	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103
Quotation No.:				Chemtest Sample ID.:	225952	225953	225954	225955	225956	225957	225958	225960	225961
				Client Sample ID.:	BH3A	BH3B	BH3B	BH3B	BH3B	BH4	BH4	BH4	BH5
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	0.4	0.8	2.1	3.0	4.0	0.6	1.6	3.6	0.6
				Date Sampled:	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	25-Nov-2015
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A		-				-			-
Asbestos Identification	U	2192	%	0.001		No Asbestos Detected				No Asbestos Detected			No Asbestos Detected
Moisture	N	2030	%	0.020	7.1	9.3	17	20	20	16	20	19	22
Stones	N	2030	%	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones, NONE	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Clay	Clay	Clay	Clay	Clay	Clay	Clay
pH	M	2010		N/A	10.8	11.4	8.5	8.2	8.4	9.9	8.3	8.3	8.4
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.13	0.26	1.5	1.6	0.95	0.43	0.052	0.88	0.21
Chloride (Extractable)	M	2220	g/l	0.010	0.058	0.038	0.039	0.038	0.065	0.048	0.087	0.071	0.19
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	M	2325	mg/kg	0.50	95	11	3.3	2.9	2.5	1.5	1.9	1.6	2.6
Sulphate (Total)	M	2430	mg/kg	100	1300	2700	15000	12000	5100	3200	530	4400	1500
Arsenic	M	2450	mg/kg	1.0	31	26	15	14	18	70	14	16	16
Cadmium	M	2450	mg/kg	0.10	0.10	0.10	< 0.10	< 0.10	0.13	< 0.10	< 0.10	0.11	< 0.10
Chromium	M	2450	mg/kg	1.0	32	34	59	46	53	33	59	58	47
Copper	M	2450	mg/kg	0.50	34	42	38	31	39	29	29	31	30
Mercury	M	2450	mg/kg	0.10	0.18	0.35	< 0.10	< 0.10	< 0.10	0.20	< 0.10	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	26	32	53	50	57	22	49	53	45
Lead	M	2450	mg/kg	0.50	210	1100	230	34	20	60	17	16	390
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.21	< 0.20	< 0.20	< 0.20	< 0.20
Zinc	M	2450	mg/kg	0.50	130	200	94	87	88	58	82	76	110
Total Organic Carbon	M	2625	%	0.20	0.47	0.71	0.27	0.31	0.33	1.2	0.27	0.31	0.31
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	N	2670	mg/kg	1.0	9.6	4.4	< 1.0	< 1.0	< 1.0	7.7	< 1.0	< 1.0	< 1.0
TPH >C21-C35	N	2670	mg/kg	1.0	28	23	< 1.0	< 1.0	< 1.0	25	< 1.0	< 1.0	< 1.0
Total TPH >C5-C35	N	2670	mg/kg	10	38	27	< 10	< 10	< 10	32	< 10	< 10	< 10
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.3	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.20	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.17	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	0.63	< 0.10	< 0.10	< 0.10	< 0.10	1.1	< 0.10	< 0.10	0.35
Anthracene	M	2700	mg/kg	0.10	0.21	< 0.10	< 0.10	< 0.10	< 0.10	0.34	< 0.10	< 0.10	0.12
Fluoranthene	M	2700	mg/kg	0.10	1.8	0.67	< 0.10	< 0.10	< 0.10	1.6	< 0.10	< 0.10	0.50

Chemtest
The right chemistry to deliver results

Results - Soil

Project: J15316 - Haverstock Hill

Client: GEA			**Chemtest Job No.:**		15-28103	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103
Quotation No.:			**Chemtest Sample ID.:**		225952	225953	225954	225955	225956	225957	225958	225960	225961
			Client Sample ID.:		BH3A	BH3B	BH3B	BH3B	BH3B	BH4	BH4	BH4	BH5
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.4	0.8	2.1	3.0	4.0	0.6	1.6	3.6	0.6
			Date Sampled:		24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	24-Nov-2015	25-Nov-2015
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Pyrene	M	2700	mg/kg	0.10	2.0	0.88	< 0.10	< 0.10	< 0.10	1.9	< 0.10	< 0.10	0.56
Benzo[a]anthracene	M	2700	mg/kg	0.10	1.0	0.53	< 0.10	< 0.10	< 0.10	0.88	< 0.10	< 0.10	0.19
Chrysene	M	2700	mg/kg	0.10	1.2	0.67	< 0.10	< 0.10	< 0.10	1.1	< 0.10	< 0.10	0.24
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	1.8	0.98	< 0.10	< 0.10	< 0.10	1.6	< 0.10	< 0.10	0.30
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	0.84	0.42	< 0.10	< 0.10	< 0.10	0.68	< 0.10	< 0.10	0.11
Benzo[a]pyrene	M	2700	mg/kg	0.10	1.5	0.74	< 0.10	< 0.10	< 0.10	1.1	< 0.10	< 0.10	0.26
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	0.83	0.44	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	0.29	0.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	0.78	0.65	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	13	6.1	< 2.0	< 2.0	< 2.0	13	< 2.0	< 2.0	2.6
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Chemtest
The right chemistry to deliver results

Results - Soil

Project: J15316 - Haverstock Hill

Client: GEA				Chemtest Job No.:	15-28103	15-28103	15-28103	15-28103	15-28103	15-28103
Quotation No.:				Chemtest Sample ID.:	225962	225964	225965	225969	225971	225972
				Client Sample ID.:	BH5	BH5	BH6	BH6	BH7	BH7
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	1.8	4.0	0.3	4.0	0.4	1.5
				Date Sampled:	25-Nov-2015	25-Nov-2015	25-Nov-2015	25-Nov-2015	26-Nov-2015	26-Nov-2015
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
ACM Type	U	2192		N/A						
Asbestos Identification	U	2192	%	0.001						
Moisture	N	2030	%	0.020	17	21	22	20	21	19
Stones	N	2030	%	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay
pH	M	2010		N/A	8.5	8.2	8.9	8.3	8.5	8.0
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.34	1.6	0.25	1.3	0.17	0.97
Chloride (Extractable)	M	2220	g/l	0.010	0.064	0.071	0.078	0.17	0.021	0.053
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	M	2325	mg/kg	0.50	1.6	1.5	83	3.8	15	2.0
Sulphate (Total)	M	2430	mg/kg	100	1200	16000	8900	12000	990	8500
Arsenic	M	2450	mg/kg	1.0	11	21	18	17	16	16
Cadmium	M	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.13	< 0.10	< 0.10
Chromium	M	2450	mg/kg	1.0	44	55	33	53	57	61
Copper	M	2450	mg/kg	0.50	27	37	49	32	28	37
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10	0.51	< 0.10	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	43	57	28	49	51	54
Lead	M	2450	mg/kg	0.50	39	18	160	19	17	17
Selenium	M	2450	mg/kg	0.20	< 0.20	0.36	< 0.20	< 0.20	< 0.20	< 0.20
Zinc	M	2450	mg/kg	0.50	69	90	64	82	90	89
Total Organic Carbon	M	2625	%	0.20	0.20	0.64	1.4	0.22	0.25	0.21
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C21-C35	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total TPH >C5-C35	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	0.18	< 0.10	< 0.10	< 0.10

Chemtest
The right chemistry to deliver results

Results - Soil

Project: J15316 - Haverstock Hill

Client: GEA			**Chemtest Job No.:**		15-28103	15-28103	15-28103	15-28103	15-28103	15-28103
Quotation No.:			**Chemtest Sample ID.:**		225962	225964	225965	225969	225971	225972
			Client Sample ID.:		BH5	BH5	BH6	BH6	BH7	BH7
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		1.8	4.0	0.3	4.0	0.4	1.5
			Date Sampled:		25-Nov-2015	25-Nov-2015	25-Nov-2015	25-Nov-2015	26-Nov-2015	26-Nov-2015
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	0.16	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

E4 Soil vapour survey

GEA Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Soil Vapour Survey

Site 5-17 Haverstock Hill, London, NW3 2BP

Client Mark Steinberg

Engineer Conisbee

Job Number J15316

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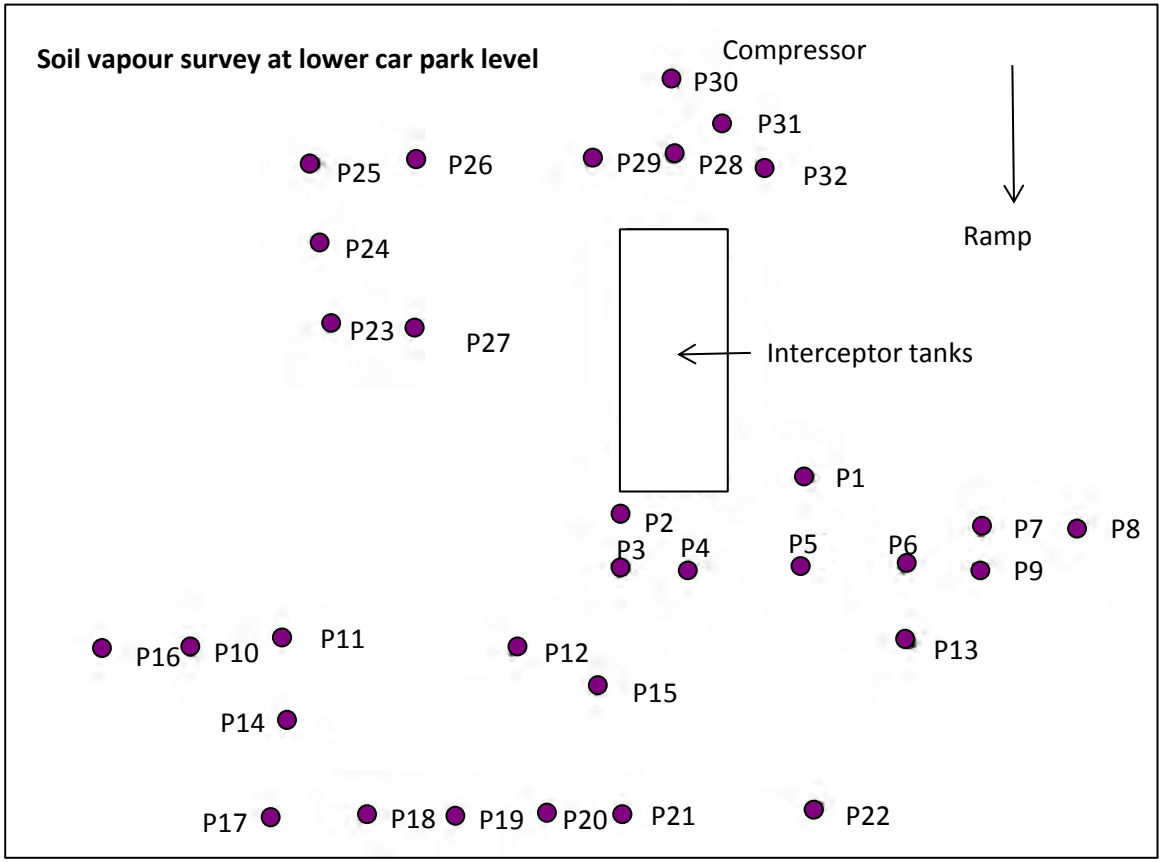
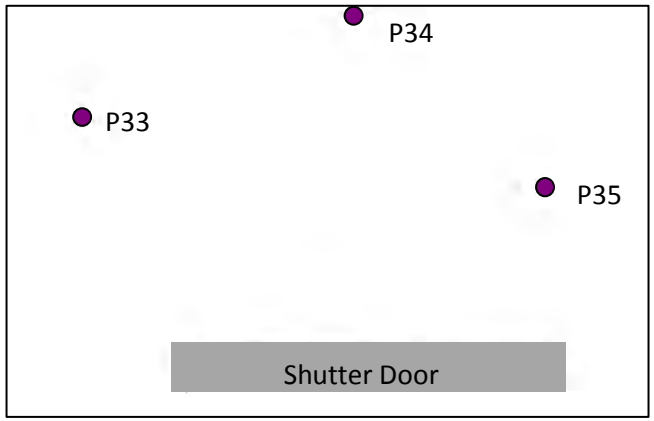
Soil vapour survey at lower car park level



Soil vapour survey at ground level (inside shutter door)



Approximate Scale in metres

GEA Geotechnical & Environmental Associates
Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Soil Vapour Survey

Site 5-17 Haverstock Hill, NW3 2BL

Client Mark Steinberg

Engineer Conisbee

Job Number J15316

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SOIL VAPOUR SURVEY

Survey Position	1	2	3	4	5	6	7	8	9
VOCS (ppmv)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Survey Position	10	11	12	13	14	15	16	17	18
VOCS (ppmv)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Survey Position	19	20	21	22	23	24	25	26	27
VOCS (ppmv)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Survey Position	28	29	30	31	32	33	34	35	
VOCS (ppmv)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Equipment Photo-ionistation detector (PID) fitted with a 10.6 eV lamp

Appendix F

Risk assessment methodology

F1 Risk assessment methodology

The potential risks to human health and environmental receptors have been considered in accordance with the current UK approach to contaminated land assessment, taking into consideration the available information on the construction and operational phases of the development.

The method for risk evaluation takes into consideration the magnitude of the potential severity of the risk, as well as the probability of the risk occurring. The risk characterisations have been assessed based on the qualitative method of interpretation set out in CIRIA guidance C552[4] and NHBC/EA/CIEH risk classification methodology[5] .

The method for risk evaluation involves the classification of the:

- magnitude of the potential consequence (severity) of the risk occurring (refer to Table F1-1); and
- magnitude of the probability (likelihood) of the risk occurring (refer to Table F1-2).

Table F1-1 Classification of consequence

Classification	Definition
Severe	Short-term (acute) risk to human health likely to result in 'significant harm' as defined by the Environmental Protection Act 1990, Part IIA. Short-term risk of pollution of a sensitive water resource. Catastrophic damage to buildings or property, structures or services. A short-term risk to an ecosystem, or organism forming part of such ecosystem.
Medium	Chronic damage to human health. Pollution of a sensitive water resource. A significant change to an ecosystem, or organism forming part of such ecosystem.
Mild	Pollution of a non-sensitive water resource, such as non-classified groundwater. Damage to buildings, structures and services.
Minor	Harm, which may result in a financial loss, or expenditure to resolve. Non-permanent effects to human health, which could easily be prevented by means such as personal protective clothing. Easily repairable effects of damage to buildings, structures and services.

4 CIRIA, DETR (2001), CIRIA C552: Contaminated land risk assessment, a guide to good practice.

5 EA, NHBC & CIEH (2008), Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D66.

Table F1-2 Classification of probability

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long-term, or there is evidence at the receptor level of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible over the short term and likely over the long term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is not certain that such an event would take place.
Unlikely	There is a pollution linkage, but circumstances are such that it is improbable that an event would occur even in the very long term.

Table F1-3 presents the risk assessment matrix and Table F1-4 defines the risk classifications.

Table F1-3 Comparison of consequence against probability

		Consequence			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**High likelihood**	Very high risk	High risk	Moderate risk	Moderate/ low risk
	Likely	High risk	Moderate risk	Moderate/ low risk	Low risk
	Low likelihood	Moderate risk	Moderate/ low risk	Low risk	Very low risk
	Unlikely	Moderate/ low risk	Low risk	Very low risk	Very low risk

Table F1-4 Risk classifications

Risk classification	Description of risk
Very high	There is a high probability that severe harm could arise to a designated receptor from an identified contaminant linkage at the Site without appropriate remediation action. OR there is evidence that severe harm to a designated receptor is currently happening. The risk, if realised, is likely to result in substantial liability.
High	Harm is likely to arise to a designated receptor from an identified contaminant linkage at the Site without appropriate remediation action. Realisation of the risk is likely to present a substantial liability.
Moderate	It is possible that without appropriate remediation action, harm could arise to a designated receptor from an identified contaminant linkage. It is relatively unlikely that any such harm would be severe, and if any harm were to occur, it is more likely that such harm would be relatively mild.
Low	It is possible that harm could arise to a designated receptor from an identified contaminant linkage. It is likely that if any harm was realised, at worst any effects would be mild.
Very low	The presence of an identified contaminant linkage does not give rise to the potential to cause harm to a designated receptor.