SITE INVESTIGATION & GROUND MOVEMENT ASSESSMENT REPORT

8 Oakhill Avenue
London
NW3 7RE

Client: N. Abrams

J19232

September 2020




GEA

Document Control

Project title	8 Oakhill Avenue, London NW3 7RE	**Project ref**	J19232
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		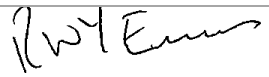	
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Issue No	Status	Amendment Details	Date	Approved for Issue
1	Final		20 November 2019	
2	Final	Inclusion of GMA	18 February 2020	
3	Final	Including comments from structural engineer	6 March 2020	
4	Final	Including comments from BIA Audit	25 September 2020	

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EXECUTIVE SUMMARY

This executive summary contains an overview of the key findings and conclusions. No reliance should be placed on any part of the executive summary until the whole of the report has been read. Other sections of the report may contain information that puts into context the findings that are summarised in the executive summary.

BRIEF

This report describes the findings of a site investigation carried out by Geotechnical and Environmental Associates Limited (GEA) on the instructions of Price and Myers, on behalf of Mr N Abrams, with respect to the refurbishment of the existing building through internal alterations, the construction of a new basement and rear extension. The purpose of the investigation has been to determine the ground conditions and hydrogeology, to carry out an assessment of ground movements resulting from excavation of the proposed basement, to assess the extent of any contamination and to provide information to assist with the design of the basement structure and suitable foundations. The report also includes information required to comply with London Borough of Camden (LBC) Planning Guidance, relating to the requirement for a Basement Impact Assessment (BIA).

DESK STUDY FINDINGS

The earliest map studied, dated 1879, shows the site to be occupied by fields, with a stream roughly 30 m to the north of the site, flowing north-northwest, which is likely to have been a former tributary of the River Westbourne and was culverted or covered by 1895. The 1896 map shows that the site remained unchanged but Redington Road and West Hampstead Avenue had been established to the east and northwest respectively. The next map, dated 1915, shows that the existing row of terraced properties had been established, as had the existing semi-detached property that bounds the site to the northeast. The majority of the surrounding area was predominantly residential, much as it is today. The site and surrounding area have essentially remained unchanged.

GROUND CONDITIONS

The investigation has confirmed the expected ground conditions in that, below a variable but generally moderate thickness of made ground, the Claygate Formation was encountered over the London Clay which was proved to the full depth of the investigation. The made ground comprised dark brown to orange-brown sandy clay with rootlets and root hair brick and concrete fragments and was found to extend to depths of between 0.20 m (8.68 m TBM) and 1.50 m (7.80 m TBM) below existing garden level. The Claygate Member was encountered in Borehole No 1 to a depth of 7.50 m (1.38 m TBM) and in Borehole Nos WS1 to WS3 to depths of between 0.20 m (9.10 m TBM) and 5.00 m (4.30 m TBM). This stratum generally comprised firm to stiff light brown mottled orange-brown slightly gravelly sandy silty clay. The London Clay was encountered in Borehole No 1 only and was found to comprise very stiff to stiff dark grey fissured silty clay to 15.00 m (-6.12 m TBM), the maximum depth investigated. Groundwater seepages were encountered in Borehole No WS1 at 1.60 m (7.40 m TBM), WS2 at 4.20 m (5.89 m TBM) and WS3 at 1.00 m (8.30 m TBM). No rise was recorded. Groundwater was also encountered in Borehole No 1 firstly at 5.40 m (3.48 m TBM) and after 20 mins rose to 5.30 m (3.58 m TBM) and secondly at 10.00 m (-1.12 m TBM) and rose to 9.80 m (-0.92 m TBM). Contamination testing has measured elevated concentrations of lead and chromium within made ground recovered from the front garden.

RECOMMENDATIONS

Formation level for the 3.50 m deep basement is likely to be within the Claygate Member and it may be possible to adopt spread foundations, subject to the findings of continued groundwater monitoring and trial excavations. Moderate width pad or strip footings bearing on the firm orange-brown silty sandy clay of the Claygate Member below the new basement floor may be designed to apply a net allowable bearing pressure of 125 kN/m^2. Consideration may also be given to piled foundations. Excavations for the basement structure will require temporary support to maintain stability and prevent any excessive ground movements. The existing foundations will need to be underpinned prior to construction of the proposed basement or be supported by the new retaining walls. Perched water is likely to be encountered within the garden area, towards the base of the made ground. However, significant groundwater inflows are not anticipated. Some limited precautions may be required with respect to the measured lead concentrations.

BASEMENT IMPACT ASSESSMENT

The BIA has not indicated any concerns with regard to the effects of the proposed basement on the site and surrounding area. It has been concluded that the impacts identified can be mitigated by appropriate design and standard construction practice.

Part 1: INVESTIGATION REPORT

This section of the report details the objectives of the investigation, the work that has been carried out to meet these objectives and the results of the investigation. Interpretation of the findings is presented in Part 2.

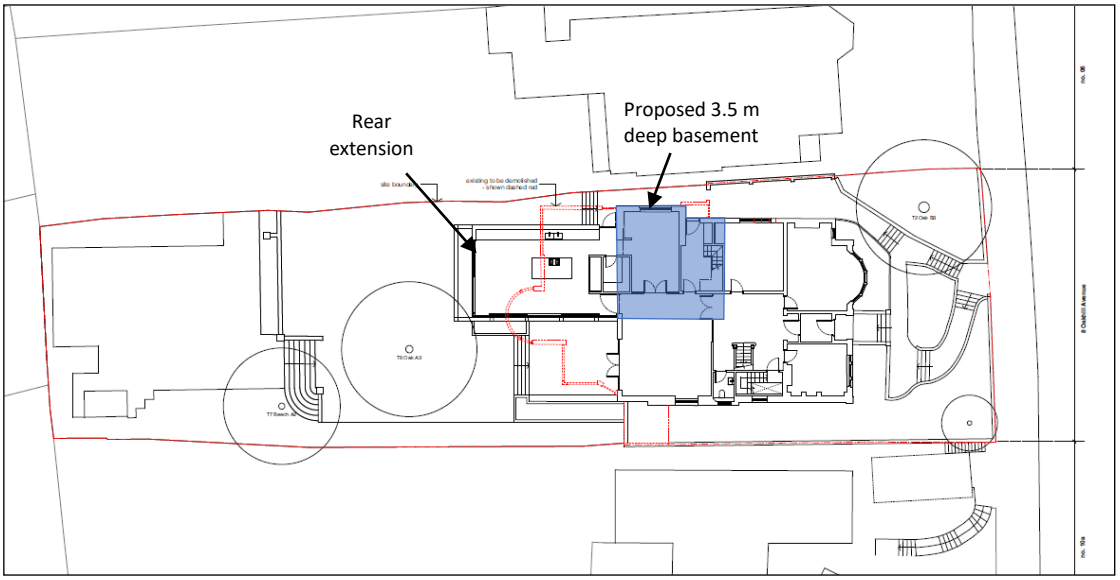
1.0 INTRODUCTION

Geotechnical and Environmental Associates Limited (GEA) has been commissioned by Price and Myers, on behalf of Mr N Abrams, to carry out a desk study and ground investigation at 8 Oakhill Avenue, London NW3 4RE.

This report also forms part of a Basement Impact Assessment (BIA), which has been carried out in accordance with guidelines from the London Borough of Camden (LBC).

1.1 Proposed Development

It is understood that it is proposed to remodel the existing building through internal alterations, to construct a single level basement beneath part of the house and to replace the rear part of the house with a new extension, as shown on the drawing below.



This report is specific to the proposed development and the advice herein should be reviewed if the proposals are amended.

1.2 Purpose of Work

The principal technical objectives of the work carried out were as follows:

- to check the history of the site with respect to previous contaminative uses;
- to provide information on the level of Unexploded Ordnance (UXO) risk;
- to determine the ground conditions and their engineering properties;

- to provide advice and information with respect to the design of suitable foundations and retaining walls;
- to assess the impact of the proposed basement on the local hydrogeology, hydrology and stability of the surrounding natural and build environment;
- to provide an indication of the degree of soil contamination present; and
- to assess the risk that any such contamination may pose to the proposed development, its users or the wider environment.

1.3 Scope of Work

In order to meet the above objectives, a desk study was carried out, followed by a ground investigation. The desk study comprised:

- a review of historical Ordnance Survey (OS) maps and environmental searches sourced from the Envirocheck database;
- a review of readily available geology maps; and
- commissioning of 1st Line Defence to undertake a preliminary UXO risk assessment.

In light of this desk study an intrusive ground investigation was carried out which comprised, in summary, the following activities:

- a single borehole advanced to a depth of 15.00 m (-6.12 m TBM) using a dismantlable cable percussion rig;
- three window sampler boreholes advanced to a depth of 5.00 m (4.30 m TBM);
- seven hand excavated trial pits to a maximum depth of approximately 1.20 m (4.88 m TBM);
- installation of three groundwater monitoring standpipes, to a maximum depth of 5.00 m (4.30m TBM);
- testing of selected soil samples for contamination and geotechnical purposes; and
- provision of a report presenting and interpreting the above data, together with our advice and recommendations with respect to the proposed development.

The report includes a contaminated land assessment which has been undertaken in accordance with the methodology presented in Contaminated Land Report (CLR) 11[1] and involves identifying, making decisions on, and taking appropriate action to deal with, land contamination in a way that is consistent with government policies and legislation within the United Kingdom. The risk assessment is thus divided into three stages comprising Preliminary Risk Assessment, Generic Quantitative Risk Assessment, and Site-Specific Risk Assessment.

The exploratory methods adopted in this investigation have been selected on the basis of the constraints of the site including but not limited to access and space limitations, together with any budgetary or timing constraints. Where it has not been possible to reasonably use an EC7 compliant investigation technique a practical alternative has been adopted to obtain indicative

1 *Model Procedures for the Management of Land Contamination* issued jointly by the Environment Agency and the Department for Environment, Food and Rural Affairs (DEFRA) Sept 2004

soil parameters and any interpretation is based upon engineering experience, local precedent where applicable and relevant published information.

1.3.1 Basement Impact Assessment

The work carried out includes a Hydrological and Hydrogeological Assessment and Land Stability Assessment (also referred to as Slope Stability Assessment). These assessments form part of the BIA procedure specified in the London Borough of Camden Planning Guidance CPG[2] and their Guidance for Subterranean Development[3] prepared by Arup (the "Arup report") in accordance with Policy A5 of the Camden Local Plan 2017. The aim of the work is to provide information on surface water, groundwater and land stability and in particular to assess whether the development will affect neighbouring properties or groundwater movements and whether any identified impacts can be appropriately mitigated by the design of the development.

1.3.2 Qualifications

The land stability element of the Basement Impact Assessment (BIA) has been carried out by Martin Cooper, a BEng in Civil Engineering, a Chartered Engineer (CEng), member of the Institution of Civil Engineers (MICE), and Fellow of the Geological Society of London (FGS) who has over 25 years' specialist experience in ground engineering. The subterranean (groundwater) flow assessment has been carried out by John Evans, MSc in Hydrogeology, Chartered Geologist (CGeol) and Fellow of the Geological Society of London (FGS). The surface water and flooding assessment has been carried out by Rupert Evans, a hydrologist with more than ten years consultancy experience in flood risk assessment, surface water drainage schemes and hydrology / hydraulic modelling. Rupert Evans is a Chartered Environmentalist, Chartered Water and Environmental Manager and a Member of CIWEM.

The assessments have been made in conjunction with Steve Branch, a BSc in Engineering Geology and Geotechnics, MSc in Geotechnical Engineering, a Chartered Geologist (CGeol) and Fellow of the Geological Society (FGS) with some 30 years' experience in geotechnical engineering and engineering geology.

All assessors meet the qualification requirements of the Council guidance.

1.4 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, gas or groundwater samples tested; no liability can be accepted for information in other data sources or conditions not revealed by the sampling or testing. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate; no independent validation of such information has been made by GEA.

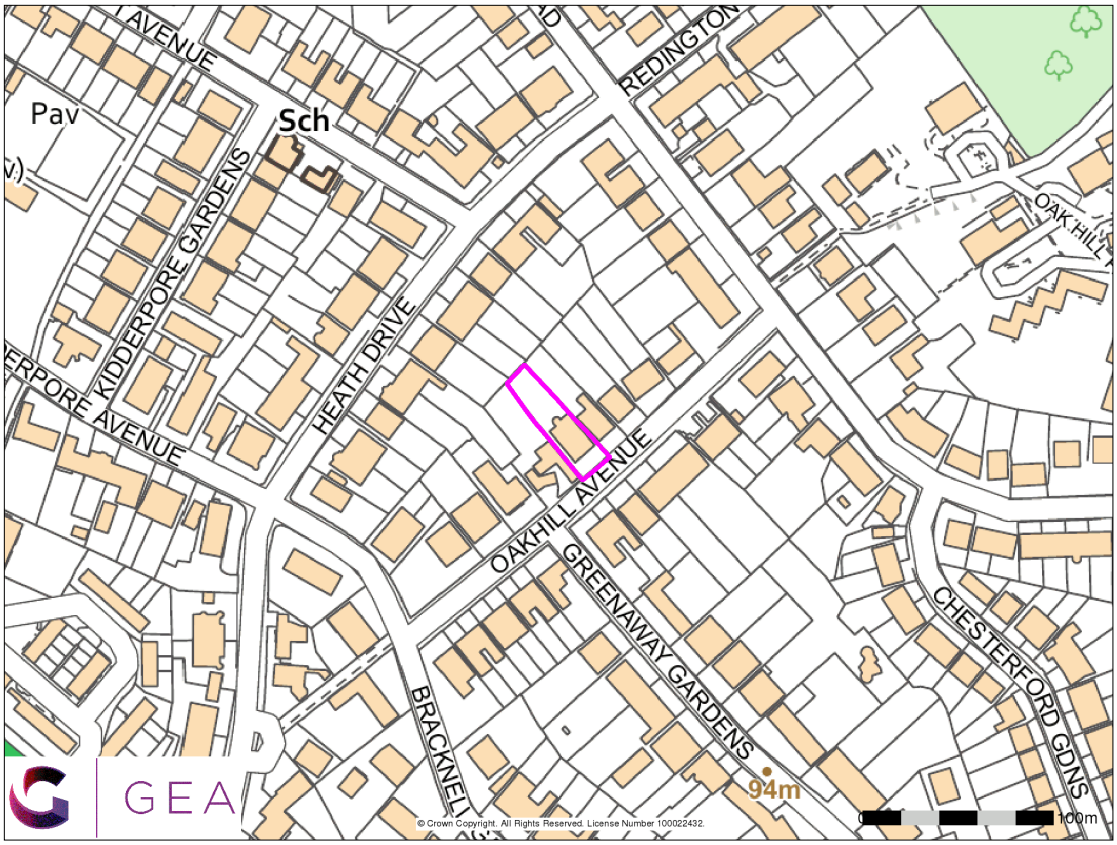
2 London Borough of Camden Planning Guidance CPG (March 2018) *Basements*
3 Ove Arup & Partners (2010) *Camden geological, hydrogeological and hydrological study. Guidance for Subterranean Development.* For London Borough of Camden November 2010

2.0 THE SITE

2.1 Site Description

The site is located in the London Borough of Camden, about 1 km west of Hampstead Underground Station. It is rectangular in shape, measuring approximately 21 m by 60 m in maximum extent. The site fronts onto Oakhill Avenue to the southwest and is bounded by similar three-storey detached properties to the west and northeast.

The site may additionally be located by National Grid Reference 525703, 185731 and is shown on the map extract below.



The southern half of the site is entirely occupied by the existing three-storey detached property, with a rear extension, whilst the northern part of the site comprises a garden. At the front of the property there is a small front garden divided into two levels with two sets of stairs leading into the house.

The rear garden is predominantly overgrown with grass, shrubs, weeds and a number of mature deciduous trees. Furthermore, it is divided into two levels. The lower level is covered partially with concrete standing and grass area.

Oakhill Avenue slopes from northeast down to southwest. The front garden slopes down steeply away from the building to an existing brickwork retaining wall that fronts the public pavement.

2.2 Site History

The history of the site and surrounding area has been researched by reference to archive historical maps and Ordnance Survey (OS) maps sourced from the Envirocheck database.

The earliest map studied, dated 1879, shows the site to be occupied by fields, with a stream roughly 30 m to the north of the site, flowing north-northwest, which is likely to have been a former tributary of the River Westbourne and was culverted or covered by 1895. The 1896 map shows that the site remained unchanged but Redington Road and West Hampstead Avenue had been established to the east and northwest respectively.

The next map, dated 1915, shows that the existing row of terraced properties had been established, as had the existing semi-detached property that bounds the site to the northeast.

The majority of the surrounding area was predominantly residential, much as it is today. The site and surrounding area have essentially remained unchanged.

2.3 Other Information

A search of public registers and databases has been made via the Envirocheck database and relevant extracts from the search are appended. Full results of the search can be provided if required.

The search has revealed that there are no landfills, waste management, transfer, treatment or disposal sites within 500 m of the site. There have been no pollution incidents to controlled waters within 250 m of the site.

An area of potentially infilled land is recorded 83 m northwest of the site, reportedly comprising an area of unknown filled ground (pond, marsh, river stream).

The search has indicated that the site is located in an area where less than 1 % of homes are affected by radon emissions; which is the lowest classification given by the Health Protection Agency (HPA) and therefore no radon protective measures will be necessary.

The site is not located within a nitrate vulnerable zone or any other sensitive land use.

The search has indicated that the site is located in a zone with very low to moderate potential for ground stability hazards, such as landslide, running sand ground, shrinking or swelling clay ground.

Information obtained on buried services has not identified any potentially sensitive infrastructure beneath Oakhill Avenue. There are also no London Underground or Network Rail Tunnels within close proximity of the site. The service search information is included within the appendix.

2.4 Geology

The British Geological Survey (BGS sheet 256) map of the area indicates the site to be underlain by the Claygate Member over the London Clay.

According to the BGS memoir, the Claygate Member generally comprises alternating beds of clay, silt and fine-grained sand, whereas the London Clay is generally homogenous, slightly calcareous silty clay to very silty clay, with some beds of clayey silt grading to silty fine-grained sand.

A previous investigation carried out by GEA about 90 m to the southwest on Oakhill Avenue, encountered a limited thickness of made ground extending to a maximum depth of 0.75 m, underlain by the Claygate Member, which was found to overlie the London Clay. The Claygate Member was found to initially comprise firm orange-brown mottled brown and grey silty sandy clay extending to depths of between 1.70 m and 3.50 m, and was underlain by firm becoming stiff orange-brown and grey very silty clay to depths of between 3.40 m and 5.30 m whereupon firm becoming stiff grey fissured silty clay of the London Clay Formation was encountered and proved to the maximum depth investigated, of 15.00 m. Groundwater was encountered within the Claygate Member in all of the boreholes, at depths of between 3.50 m and 6.50 m and groundwater monitoring approximately six weeks after installation recorded water at a depth of 3.00 m.

A search of the BGS records has identified records of a deep borehole that was drilled roughly 1 km to the southeast of the site, which indicates that the London Clay is likely to extend to a depth of at least 120 m.

2.5 Hydrology and Hydrogeology

The Claygate Member is classified by the Environment Agency (EA) as a Secondary 'A' Aquifer, which is a permeable layer capable of supporting water supply at local rather than strategic scale, and in some cases proving an important source of base flow to rivers; however this classification is based on the presence of continuous saturated sand bed horizons within the Claygate Member.

The underlying London Clay is classified as an Unproductive Stratum, defined by the EA as a rock or drift deposit with low permeability and of negligible significance for water supply or river base flow.

There are no listed water abstraction points or EA designated Source Protection Zones (SPZs) within 1 km of the site. According to the Envirocheck Report the nearest natural surface water feature is a spring that issues from the West Heath, approximately 739 m to the north of the site and up topographic gradient, which flows northwest towards Leg of Mutton Pond.

On the historical map dated 1879 and on Map 20 of the Lost Rivers of London[4], a headwater of the River Westbourne is shown to have risen roughly 30 m to the north of the site and flowed north-northwest before joining other tributaries and flowing in a generally southerly direction, passing through Hyde Park, where its valley is occupied by The Serpentine, continuing south though Chelsea and issuing into the River Thames opposite Battersea Park. Given the location of the source of this tributary of the River Westbourne, it is likely that it was formed by a spring issuing from close to the boundary between the silty sandy clay of the Claygate Member and the overlying sands of the Bagshot Formation.

Groundwater is likely to be present within permeable horizons within the Claygate Member and where these horizons are continuous, groundwater will flow beneath the site and will generally flow in a generally westerly or south-westerly direction, downslope towards the course of the former River Westbourne.

The site is located within an area with limited potential of flooding from rivers or sea, as defined by the Environment Agency.

Figure 11 of the Arup report and reference to the Lost Rivers of London indicates that the site is located in the vicinity of the River Westbourne.

4 Nicholas Barton and Stephen Myers (2016) *London's Lost Rivers. Revised Edition.* Historical Publications Ltd

The existing gardens at the front and back of the property are partially covered by concrete hardstanding and soft landscaping. Infiltration of rainwater will occur to areas of soft landscaping and to surface water drains, such that the majority of surface runoff currently drains into combined sewers in the road.

As the development does not result in a change to the present conditions, for example through the loss of any permeable areas, there will not be an increase in runoff rate or volume into the existing sewer system, or that could have a potentially adverse impact on the surrounding area. There should not, therefore, be any requirement for any mitigation measures.

2.6 Preliminary Risk Assessment

Part IIA of the Environmental Protection Act 1990, which was inserted into that Act by Section 57 of the Environment Act 1995, provides the main regulatory regime for the identification and remediation of contaminated land. The determination of contaminated sites is based on a "suitable for use" approach which involves managing the risks posed by contaminated land by making risk-based decisions. This risk assessment is carried out on the basis of a source-pathway-receptor approach.

2.6.1 Source

The historical usage of the site that has been established by the desk study and the site walkover indicates that the site does not have a potentially contaminative history by virtue of it having been occupied by housing for the entire developed history. Thus, there are no obvious likely sources of contamination on the site or in its immediate vicinity.

There are no historical or existing landfill sites within 500 m of the site and therefore there is not a risk to the site from migrating landfill gas.

2.6.2 Receptor

Consideration is being given to the construction of a new basement beneath the existing house and rear patio area. The site will continue to have a residential end use and no new receptors will result. However, the residential end use is considered a high sensitivity end-use. Being underlain by the Claygate Member, classified as a Secondary 'A' Aquifer, groundwater is considered to be a moderately sensitive target. Buried services are likely to come into contact with any contaminants present within the soils through which they pass, and site workers are likely to come into direct contact with any contaminants present in the soil during basement excavation and construction.

Perched water may be present in the made ground or in the vicinity of existing foundations, although such pockets of water are likely to be localised and unlikely to form part of a wider aquifer.

2.6.3 Pathway

Within the site, end users will be isolated from direct contact with any contaminants present within the near surface soils by the presence of the building and any areas of hardstanding, thus limiting potential contaminant exposure pathways, whilst a potential for direct contact will exist in the rear garden area and any other areas of soft landscaping, although this pathway is already in existence. Any soluble contaminants within the made ground could potentially migrate onto adjacent sites as a result of infiltration of surface run-off, although this pathway is also already in existence.

The presence of negligibly permeable clay of the London Clay Formation underlying the permeable silty very sandy clay of the Claygate Member will limit the potential for

groundwater percolation to a sensitive aquifer at depth, and thus a pathway is not considered likely to exist to a Principal Aquifer. Buried services may be exposed to any contaminants present within the soil through direct contact and site workers will come into contact with the soils during construction works.

There is thus considered to be a low potential for a contaminant pathway to be present between any potential contaminant source and a target for the particular contaminant.

2.6.4 Preliminary Risk Appraisal

On the basis of the above it is considered that there is a VERY LOW risk of there being a significant contaminant linkage at this site which would result in a requirement for major remediation work. Furthermore, as there is no evidence of filled ground within the vicinity of the site and no landfill sites, there is not considered to be a significant potential for hazardous soil gas to be present on or migrating towards the site.

2.7 UXO Risk Assessment

A Preliminary UXO Risk Assessment has been completed by 1st Line Defence (report ref EP9576-00, dated August 2019), and a copy of the report is included in the appendix.

The risk assessment has been carried out in accordance with the guidelines provided by CIRIA[5], which state that the likelihood of encountering and detonating UXO below a site should be assessed along with establishing the consequences that may arise. The first phase comprises a preliminary risk assessment, which should be undertaken at an early stage of the development planning. If such an assessment identifies a high level of risk then a detailed risk assessment should be carried out by a UXO specialist, which will identify an appropriate course of action with regard to risk mitigation.

During World War II (WWII) the site was located within the Metropolitan Borough of Hampstead which sustained a high bombing density according to official statistics. Despite this, no bomb strikes are recorded within the site area, with the closest recorded strike located approximately 140 m southeast from the site. The site was initially recorded on the London County Council bomb damage maps as having sustained damage from this event. However, this was later rectified to show no damage, or only minor damage. This is supported by other evidence, such as historical mapping and aerial photography, and it is considered unlikely that an item of UXO could have remained unnoticed or unrecorded at this site.

Following the findings of this preliminary report, the site has been classified as having a minimal to low risk, such that no further action is required.

5 CIRIA C681 (2009) Unexploded *ordnance (UXO) A guide for the construction industry*

3.0 SCREENING

The LBC guidance suggests that any development proposal that includes a subterranean basement should be screened to determine whether or not a full BIA is required.

3.1 Screening Assessment

A number of screening tools are included in the Arup document and for the purposes of this report reference has been made to Appendices E1, E2 and E3 which include a series of questions within screening flowcharts for surface flow and flooding, subterranean (groundwater) flow and land stability. The flowchart questions and responses to these questions are tabulated below.

3.1.1 Subterranean (groundwater) Screening Assessment

Question	Response for 8 Oakhill Avenue
1a. Is the site located directly above an aquifer?	*Yes. The Claygate Member is designated a Secondary 'A' Aquifer on the basis that in some areas permeable sand layers are present. In the absence of these sand layers the formation is predominantly clay and does not behave as an aquifer.*
1b. Will the proposed basement extend beneath the water table surface?	It is possible that the proposed basement could extend beneath a water table provided permeable sand layers are present. In the absence of these sand layers the Claygate Member formation clay strata could not support a water table.
2. Is the site within 100 m of a watercourse, well (used/ disused) or potential spring line?	*Yes. Historically, a source of the River Westbourne arose roughly 30 m to the north of the site and flowed north-northwest before joining other tributaries and flowing in a generally southerly direction.*
3. Is the site within the catchment of the pond chains on Hampstead Heath?	No. Figure 14 of the Arup report confirms that the site is not located within this catchment area
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No. It is proposed to keep the proportion of hardstanding roughly the same
5. As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	No. Run-off from hardstanding will drain to the sewer system, as it does currently.
6. Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than, the mean water level in any local pond or spring line?	No.

The above assessment has identified the following potential issues that need to be assessed:

Q1a The site is located directly above the Claygate Member, which is a Secondary 'A' Aquifer.
Q1b There is a possibility that the proposed basement may extend beneath the water table.
Q2 The site is approximately 30 m north of what is thought to be a spring line to the former River Westbourne.

3.1.2 Stability Screening Assessment

Question	Response for 8 Oakhill Avenue
1. Does the existing site include slopes, natural or manmade, greater than 7°?	No. The site is detached with low vertical retaining walls; however, the overall slope angle of the site is less than 7°.
2. Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7°?	No.
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	*Yes. The Camden Geological, Hydrogeological and Hydrological Study Slope Angle Map shows that the area of land to the rear of the site, which is currently occupied by houses fronting onto Heath Drive, has a slope angle greater than 7°.*
4. Is the site within a wider hillside setting in which the general slope is greater than 7°?	No. However as mentioned above adjacent land to the rear of the site does have slope angles greater than 7°.
5. Is the London Clay the shallowest strata at the site?	No. The site is underlain by the Claygate Member over the London Clay Formation.
6. Will any trees be felled as part of the proposed development and / or are any works proposed within any tree protection zones where trees are to be retained?	No trees are proposed to be felled
7. Is there a history of seasonal shrink-swell subsidence in the local area and / or evidence of such effects at the site?	*Yes. There is a moderate potential for shrinking or swelling clay ground stability hazards.*
8. Is the site within 100 m of a watercourse or potential spring line?	*Yes. Historically a source of the River Westbourne arose roughly 30 m to the north of the site.*
9. Is the site within an area of previously worked ground?	No. The geological map of the area does not indicate any worked ground.
10. Is the site within an aquifer?	*Yes. A Secondary 'A' Aquifer.*
11. Is the site within 50 m of Hampstead Heath ponds?	No. The ponds are over 1 km to the east of the site.
12. Is the site within 5 m of a highway or pedestrian right of way?	No. Although the site fronts onto Oakhill Avenue to the southeast, the basement will be constructed to the rear of the existing house, at a distance greater than 5 m.
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	*Yes. The depth of adjacent foundations is unknown, but it is likely that the development will increase the foundation depths relative to the neighbouring properties to a relatively significant extent.*
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	No. An online search for London Underground Tunnels and railway tunnels did not indicate any in the proximity of the site. This is confirmed with reference to ARUPs Transport Infrastructure map, Figure 18. Thames Water has been contacted and their plans indicate no deep sewers or tunnels under or in proximity of the site

The above assessment has identified the following potential issues that need to be assessed:

Q3 The development neighbours land with a slope greater than 7°.
Q7 There is a history of seasonal shrink-swell subsidence in the local area.
Q8 The site is within 100 m of a watercourse or potential spring line.
Q10 The site is located within the Secondary 'A' Aquifer of the Claygate Member.
Q13 The proposed basement is likely to increase the differential depth of foundations relative to neighbouring properties.

3.1.3 Surface Flow and Flooding Screening Assessment

Question	Response for 8 Oakhill Avenue
1. Is the site within the catchment of the pond chains on Hampstead Heath?	No. Figure 14 of Arup report confirms that the site is not located within this catchment area.
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	No. There will not be an increase in impermeable area across the site, so the surface water flow regime will be unchanged. The basement will mainly be beneath the footprint of the building and existing hardstanding areas, and the 1m distance between the roof of the basement and ground surface as recommended by section 3.2 of the CPG Basements 2018 does not apply across these areas.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No. There will not be a change in impermeable area across the ground surface above the basement.
4. Will the proposed basement development result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream watercourses?	No. There will not be an increase in impermeable area across the site, so the surface water flow regime will be unchanged. The basement is located within the footprint of the building and existing hardstanding areas, and the 1m distance between the roof of the basement and ground surface as recommended by section 3.2 of the CPG Basements 2018 does not apply across these areas.
5. Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No. The proposed basement is very unlikely to result in any changes to the quality of surface water being received by adjacent properties or downstream watercourses as the surface water drainage regime will be unchanged and the land uses will remain the same.
6. Is the site in an area identified to have surface water flood risk according to either the Local Flood Risk Management Strategy or the Strategic Flood Risk Assessment or is it at risk of flooding, for example because the proposed basement is below the static water level of nearby surface water feature?	No. The findings of this BIA together with the Camden Flood Risk Management Strategy dated 2013 and Figures 3iv, 4e, 5a and 5b of the SFRA dated 2014, in addition to the Environment Agency online flood maps show that the site has a very low flooding risk from surface water, sewers, reservoirs (and other artificial sources), groundwater and fluvial/tidal watercourses. It is possible that the basement will be constructed within pockets of perched water and the recommendations outlined in the BIA with regards to water-proofing and tanking of the basement will reduce the risk to acceptable levels. In accordance with paragraph 5.11 of the CPG, a positive pumped device will be installed in the basement in order to further protect the site from sewer flooding.

The above assessment has not identified any potential issues that need further assessment, although the hydrological setting is discussed further within this report.

4.0 SCOPING AND SITE INVESTIGATION

The purpose of scoping is to assess in more detail the factors to be investigated in the impact assessment. Potential impacts are assessed for each of the identified potential impact factors.

4.1 Potential Impacts

The following potential impacts have been identified by the screening process

Potential Impact	Consequence
The site is located directly above an aquifer	The site is underlain by the Claygate Member, which is classified as a Secondary 'A' Aquifer. This has the potential of being able to support local water supplies as well as forming an important source of base flow for local rivers. There is the potential for the hydrogeological setting to be affected by a basement development.
The proposed basement extends beneath the water table surface	It is possible the basement excavation could extend below the water table. Should this happen, the basement structure is capable of diverting groundwater flow such that groundwater level is affected on both the up slope and down slope side of the basement structure. This in turn has the potential to affect the local hydrogeology and any adjacent structures.
Is the site within 100 m of a watercourse, well (used/ disused) or potential spring line?	The basement may alter the groundwater flow regime supporting the watercourse or potential spring line and diverting the groundwater flow route may cause new springs to form or the reactivation of old springs. Seasonal spring lines and changes in groundwater may also affect slope stability.
The development neighbours land with a slope greater than 7°. The Claygate Member is the shallowest strata at the site and as such may be subject to seasonal shrink-swell	Local instability within the site and adjoining sites may occur.
The development is likely to increase the differential depth of foundations relative to neighbouring properties.	Excavation of a basement may result in structural damage to neighbouring properties if there is a significant differential depth between adjacent foundations.

These potential impacts have been investigated through the site investigation, as detailed below.

4.2 Exploratory Work

In order to meet the objectives described in Section 1.2, as far as possible within the access limitations presented by the presence of the existing building, a single cable percussion borehole was drilled in the rear garden to a depth of 15.00 m (-6.12 m TBM). This borehole was supplemented by three window sampler boreholes to a depth of 5.00 m (4.00 m, 4.30 m and 5.09 m TBM).

Groundwater monitoring standpipes were installed in the borehole in the rear garden and in two of the window sampler boreholes to a depth of 5.00 m (4.30 m TBM and 5.09 m TBM) and have been subsequently monitored on two occasions to date.

Six trial pits were hand excavated to depths of between 0.70 m (9.12 m TBM) and 1.35 m (8.83 m TBM) in order to determine the configuration of the existing foundations and boundary wall conditions.

A selection of the disturbed samples recovered from the boreholes was submitted to a soil mechanics laboratory for a programme of geotechnical testing and an analytical laboratory for a programme of contamination testing.

All of the work was carried out under the supervision of a geotechnical engineer from GEA. The borehole and trial pit records are appended, together with the results of the laboratory testing and a site plan indicating the borehole locations. The levels shown on the borehole records have been interpolated from spot heights on a Topographical Survey (Drawing Ref PL12174, dated May 2019, provided by the consulting engineers), which were measured relative to a Temporary Benchmark (TBM).

4.3 Sampling Strategy

The scope of the works was specified by the consulting engineers, with input from GEA. The borehole positions were specified by the consulting engineers and positioned on site by GEA with due regard to the proposed development, whilst avoiding areas of known services.

Three samples of the made ground were subjected to analysis for a range of common industrial contaminants and contamination indicative parameters. For this investigation the analytical suite for the soil included a range of metals, speciation of total petroleum hydrocarbons (TPH), polycyclic aromatic hydrocarbons (PAH), total cyanide and monohydric phenols. The soil samples were selected to provide a general view of the chemical conditions of the soils that are likely to be involved in a human exposure or groundwater pathway and to provide advice in respect of re-use or for waste disposal classification.

The contamination analyses were carried out at an MCERTs accredited laboratory with the majority of the testing suite accredited to MCERTS standards. Details of the MCERTs accreditation and test methods are included in the Appendix together with the analytical results.

A number of samples recovered from the boreholes were submitted to a geotechnical laboratory for a programme of testing that included moisture content and Atterberg limit tests, undrained triaxial compression tests and soluble sulphate and pH level analysis.

5.0 GROUND CONDITIONS

The investigation has confirmed the expected ground conditions in that, below a variable but generally limited thickness of made ground, the Claygate Member was encountered to a depth of 7.50 m (1.38 m TBM), whereupon the London Clay was encountered to the full depth of the investigation.

5.1 Made Ground

The made ground in the rear garden was found to extend to depths of between 0.20 m (8.68 m TBM) and 1.50 m (7.50 m TBM), where it generally comprised dark brown to orange-brown sandy clay with rootlets and root hair, brick and concrete fragments.

No evidence of significant contamination was identified during the fieldwork. As a precaution, three samples of the made ground were tested for the presence of contamination and the results are presented in Section 5.5.

5.2 Claygate Member

The Claygate Member was encountered in Borehole No 1 to a depth of 7.50 m (1.38 m TBM) and in Borehole Nos WS1 to WS3 to depths of between 0.20 m (9.10m TBM) and 5.00 m (4.30 m TBM). This stratum generally comprised stiff to firm light brown mottled orange brown slightly gravelly sandy silty clay.

5.3 London Clay Formation

The London Clay was encountered in Borehole No 1 only and was found to comprise very stiff to stiff dark grey fissured silty clay to 15.00 m (-6.12 m TBM), the maximum depth investigated.

The clay in Borehole No WS2 was suspected to be desiccated to a depth of 2.30 m. Laboratory plasticity index tests indicate the clay to be of medium to high volume change potential.

This stratum was observed to be free of evidence of contamination.

5.4 Groundwater

Groundwater seepages were encountered in Borehole Nos WS1 at 1.60 m (7.40 m TBM), WS2 at 4.20 m (5.89 m TBM) and WS3 at 1.00 m (8.30 m TBM). No rise was recorded.

Groundwater was also encountered in Borehole No 1 at 5.40 m (3.48 m TBM) and after 20 mins rose to 5.30 m (3.58 m TBM) and again at 10.00 m (-1.12 m TBM), which rose to 9.80 m (-0.92 m TBM).

The standpipes installed in Borehole Nos 1, WS2 and WS3 have been monitored on three occasions since installation to date, the results of which are shown in the table below. The depths related to WS3 are not accurate due to faulty installation of the cover cap.

Date	Borehole No	Depth to water m (Level m TBM)
27/09/2019	BH1	4.90 (3.98)
	WS2	4.20 (5.89)
	WS3	0.70 (8.60)
24/10/2019	BH1	3.80 (5.08)
	WS2	3.65 (6.44)
	WS3	0.90 (8.40)
26/02/2020	BH1	Not accessible
	WS2	3.75 (6.34)
	Ws3	1.05 (8.25)

5.5 Soil Contamination

The table below sets out the values measured within three samples of made ground; all concentrations are in mg/kg unless otherwise stated.

Determinant	WS1 0.50 m	WS2 0.50 m	WS3 0.30 m
Asbestos	Not detected	Not detected	Not detected
pH	7.8	4.8	8.2
Arsenic	13	25	22
Cadmium	<0.2	<0.2	<0.2
Chromium	**25**	**27**	**26**
Copper	36	39	33
Mercury	<0.3	<0.3	<0.3
Nickel	16	12	14
Lead	**340**	150	**870**
Selenium	<1.0	3.8	<1.0
Zinc	110	60	240
Total Cyanide	<1.0	<1.0	<1.0
Total Phenols	<1.0	<1.0	<1.0
Sulphide	1.3	<1.0	3.4
Total TPH	<10	35	<10
Naphthalene	<0.05	<0.05	<0.05
Benzo(a)pyrene	0.21	0.40	0.53
Total PAH	1.69	5.34	5.50
Total organic carbon %	1.1	2.6	1.5

Note: Figure in bold indicates concentration in excess of risk-based soil guideline values, as discussed in Part 2 of this report

5.5.1 Generic Quantitative Risk Assessment

The use of a risk-based approach has been adopted to provide an initial screening of the test results to assess the need for subsequent site-specific risk assessments. To this end the table below indicates those contaminants of concern that have values in excess of a generic human health risk based guideline values which are either that of the CLEA[6] Soil Guideline Value where available, the Defra C4SLs or are a Generic Guideline Value calculated using the CLEA UK Version 1.07 software. For this development, the soil concentrations measured have been compared with values generated by the software assuming a residential end use with plant uptake to determine the relative sensitivity to the end use. The key generic assumptions for the proposed end use are as follows:

- that groundwater will not be a critical risk receptor;

6 *Updated Technical Background to the CLEA Model (Science Report SC050021/SR3) Jan 2009* and Soil Guideline Value reports for specific contaminants; all DEFRA and Environment Agency.

- that the critical receptor for human health will be a young female aged 0 to 6 years old;
- that the exposure duration will be six years;
- that the building type equates to a terraced house; and
- that the critical exposure pathways will be direct soil and indoor dust ingestion, consumption of homegrown produce, consumption of soil adhering to home grown produce, skin contact with soils and dust, and inhalation of dust and vapours.

It is considered that these assumptions are acceptable for this generic assessment of this site, with the exception of the groundwater risk, which will be discussed in Part 2. The tables of generic screening values derived by GEA and an explanation of how each value has been derived are included in the Appendix.

Where contaminant concentrations are measured at concentrations below the generic screening value it is considered that they pose an acceptable level of risk and thus further consideration of these contaminant concentrations is not required. Where concentrations are measured in excess of these generic screening values there is considered to be a potential that they could pose an unacceptable risk and thus further action will be required which could include;

- additional testing to zone the extent of the contaminated material and thus reduce the uncertainty with regard to its potential risk;
- site specific risk assessment to refine the assessment criteria and allow an assessment to be made as to whether the concentration present would pose an unacceptable risk at this site; or
- soil remediation or risk management to mitigate the risk posed by the contaminant to a degree that it poses an acceptable risk.

The results of the contamination testing have revealed elevated concentrations of lead within two samples of made ground tested, from Borehole Nos WS 1 and WS 3. All samples were found with marginally elevated concentrations of chromium. The rest of the contaminants were found to be below their respective generic guideline value and of generally low concentrations.

This assessment is based upon the potential for risk to human health, which at this site is considered to be the critical risk receptor.

The results are discussed in detail in Section 2 of this report.

5.6 Existing Foundations

Six trial pits were excavated to investigate the existing foundations and boundary wall conditions.

The trial pit findings are summarised in the table overleaf and the trial pit records, and associated site plan can be found in the appendix.

Trial Pit No	Structure	Foundation detail	Bearing Stratum
TP1	Rear garden - west	Concrete and brick corbels Top 0.20 m Base 0.80 m Lateral projection 230 mm	Made ground
TP2	Front garden - southwest	Brick corbels Top 0.70 m Base 1.20 m Lateral projection 300 mm	Made ground
TP3	Rear area - north	Brick corbels Top 0.20 m Base 0.70 m Lateral projection 270 mm	Made ground
TP4	Front garden - south	Concrete strip footing Top 0.90 m Base 1.20 m Lateral projection 120 mm	Dark brown gravelly fine to coarse SAND
TPA	Indoors – entrance to apartments 8A and 8B	Brick corbels Top 0.36 m Base 0.85 m Lateral projection 270 mm	Made ground
TPB (section AA')	Indoors – kitchen	Brick corbels Top 0.70 m Base 1.35 m Lateral projection 270 mm	Made ground
TPB (section BB')	Indoors - kitchen	Brick corbels Top 0.36 m Base 0.90 m Lateral projection 220 mm	Made ground

Part 2: DESIGN BASIS REPORT

This section of the report provides an interpretation of the findings detailed in Part 1, in the form of a ground model, and then provides advice and recommendations with respect to foundation options and contamination issues.

6.0 INTRODUCTION

It is understood that it is proposed to remodel the existing building through internal alterations, to construct a single storey basement at the rear of the building, along with a new rear extension that will replace part of the existing house.

The proposed basement is to be constructed at about 3.50 m (approx. 6.50 m TBM) below internal ground floor slab level.

7.0 GROUND MODEL

The desk study has revealed that the site and surrounding area have not had a potentially contaminative history, and on the basis of the fieldwork, the ground conditions at this site can be characterised as follows:

- below a generally moderate thickness of made ground, the Claygate Member is underlain by the London Clay Formation;
- the made ground extends to depths of between 0.20 m (8.68 m TBM) and 1.50 m (7.50 m TBM);
- the Claygate Member was encountered in Borehole No 1 to a depth of 7.50 m (1.38 m TBM) and in Borehole Nos WS1, WS2 and WS3 to depths of between 0.20 m (9.10 m TBM) to 5.00 m 4.30 m TBM). This stratum generally comprised stiff to firm light brown mottled orange-brown slightly gravelly sandy silty clay;
- below these depths the London Clay increases in strength and is present to the maximum depth investigated of 15.00 m. (-6.12 m TBM);
- the London Clay was found to be desiccated in Borehole No WS2 to a depth of 2.30 m;
- groundwater was encountered during sampling at depths of between 1.00 m (8.30 m TBM) and 9.80 m (-0.92 m TBM) and has subsequently been measured at depths of between 0.70 m (8.60 m TBM) and 4.90 m (3.98 m TBM); and
- the made ground has been found to contain elevated concentrations of lead and marginally elevated concentrations of chromium.

8.0 ADVICE AND RECOMMENDATIONS

Excavations for the proposed basement structure will require temporary support to maintain stability and to prevent any excessive ground movements. It should be feasible to construct the basement without the requirement for groundwater control measures, although provision will need to be made to control perched water inflows from the base of the made ground.

Formation level for the proposed development is likely to be within the Claygate Member which should provide an eminently suitable bearing stratum for spread foundations excavated from basement level.

8.1 Basement Excavation

Formation level for the basement is likely to be within the Claygate Member at a depth of approximately 3.50 m (6.50m TBM). On the basis of the groundwater monitoring to date, inflows of groundwater are likely to be encountered during the basement excavation, although these are likely to be restricted to shallow inflows of perched water from within the made ground, particularly in the vicinity of existing structures and following periods of heavy rainfall.

It is important to bear in mind that inflows may result from the presence of inter-connected pockets of water within the sand and silt pockets of the Claygate Member, which were not encountered during the investigation. However, any such inflows are likely to be relatively minor in nature and should be adequately dealt with through sump pumping, although it would be prudent for the chosen contractor to have a contingency plan in place to deal with more significant or prolonged inflows as a precautionary measure.

It would be prudent to carry out a number of trial excavations, to depths as close to the full basement depth as possible, to provide an indication of the likely rate and volume of groundwater inflows, and to provide an indication of excavation stability.

There are a number of methods by which the sides of the basement excavation could be supported in the temporary and permanent conditions. The choice of wall may be governed to a large extent by whether it is to be incorporated into the permanent works and have a load bearing function. The final choice will depend to a large extent on the need to protect nearby structures from movements, the required overall stiffness of the support system, and the need to control groundwater movement through the wall in the temporary condition. In this respect the stability of the existing and adjacent buildings, will be paramount.

It is understood that the preferred method of retaining wall construction is through a combination of reinforced concrete walls or traditional mass concrete underpinning of the existing walls, which will have the benefit of minimising the plant required and maximising usable space in the new basement construction.

Whilst the proposed construction is set back from the site boundaries and the foundations of the adjoining structures, careful workmanship will still be required to ensure that movement of the surrounding structures does not arise. The contractor should also be required to provide details of how they intend to control groundwater and instability of excavations, should it arise.

The ground movements associated with the basement excavation will depend on the method of excavation and support and the overall stiffness of the basement structure in the temporary condition. Thus, a suitable amount of propping will be required to provide the necessary rigidity. In this respect the timing of the provision of support to the wall will have an important

effect on movements. The stability of the adjacent foundations will need to be ensured at all times and the existing foundations will need to be underpinned prior to construction of the proposed new basements or will need to be supported by new retaining walls. A Ground Movement Analysis has been carried out in accordance with the requirements of CPG and is presented in Part 3 below.

8.1.1 Retaining Walls

The following parameters are suggested for the design of the permanent basement retaining walls.

Stratum	Bulk Density (kg/m^3)	Effective Cohesion ($c' - kN/m^2$)	Effective Friction Angle (Φ' – degrees)
Made ground	1700	Zero	27
Claygate Member	2000	Zero	25

Groundwater has been measured at levels of between 3.98 m TBM and 8.60 m TBM and likely to be encountered during basement excavation as minor inflows of perched water from the made ground and underlying superficial deposits.

Consideration should also be given to the risk of surface water building up behind the retaining walls and unless adequate drainage can be incorporated to prevent such build-up, it is recommended that the basement is designed with a water level assumed to be 1.00 m below ground level.

The trial excavations mentioned above, further monitoring and the advice in BS8102:2009[7] should be considered to finalise the design water level.

8.1.2 Basement Heave

The excavation of the proposed basement is likely to result in heave of the underlying Claygate Member, which will comprise an "immediate" elastic component that may be expected to occur within the construction period, together with long term swelling movement that would theoretically occur over a period of many years. The effects are likely to be mitigated to some extent by the loads applied by the existing and proposed structures.

Further consideration is given to potential heave movements in Part 3 of this report.

8.2 Spread Foundations

Spread foundations, including underpinned foundations, bearing beneath basement formation level in the firm to stiff silty clay of the Claygate Member may be designed to apply a net allowable bearing pressure of 125 kN/m^2 at a depth of 3.00 m (7.00 m TBM). This value incorporates an adequate factor of safety against bearing capacity failure and should ensure that settlement remains within normal tolerable limits.

The depth of the basement excavation is expected to be such that foundations will be placed below the depth of actual or potential desiccation, but this should be checked once the proposals have been finalised, with the survey drawing showing former and existing trees. Notwithstanding NHBC guidelines, all foundations should extend beyond the zone of desiccation. In this respect, it would be prudent to have all foundation excavations inspected by a suitably experienced engineer. Due allowance should be made for future growth of existing / proposed trees. The requirement for compressible material alongside foundations should be determined by reference to the NHBC guidelines.

7 BS8102 (2009) *Code of practice for protection of below ground structures against water from the ground*

8.3 Piled Foundations

For the ground conditions at this site some form of bored pile is likely to be the most appropriate type. A conventional rotary augered pile may be appropriate, with temporary casing installed to maintain stability and prevent groundwater inflows, or alternatively the use of bored piles installed using continuous flight auger (cfa) techniques, which would not require the provision of casing, would also be appropriate.

The following table of ultimate coefficients may be used for the preliminary design of bored piles, based on the SPT & Cohesion / depth graph in the appendix.

Stratum	Depth m (m TBM)	kN / m²
Ultimate Skin Friction		
Made Ground	GL (10.00) to 3.00 (7.00)	Ignore
Claygate Member and London Clay (α=0.5)	3.00 (7.00) to 15.00 (-5.00)	Increasing linearly from 30 to 50
Ultimate End Bearing		
London Clay	7.50 (2.50) to 15.00 (-5.00)	Increasing linearly from 630 to 900

In the absence of pile tests, guidance from the London District Surveyors Association (LDSA)[8] suggests that a factor of safety of 2.6 should be applied to the above coefficients in the computation of safe theoretical working loads. On the basis of the above coefficients and a factor of safety of 2.6, the following safe working loads have been estimated for 300 mm and 450 mm diameter CFA piles.

Depth m	Safe Working Load (kN)	
	300 mm Ø	450 mm Ø
10.00	105	170
15.00	200	315

The above examples are not intended to constitute any form of recommendation regarding the pile size or type, but merely serve to illustrate the use of the above coefficients. Specialist piling contractors should be consulted about the design of an appropriate piling scheme and their attention should be drawn to potential groundwater inflows within the made ground and silt and sand partings within the London Clay.

8.4 Basement Floor Slab

It should be possible to adopt a light to moderately loaded ground bearing floor slab bearing on the Claygate Member. Consideration may need to be given to designing the slab to accommodate heave movements and this should be considered in more detail once the proposed loads and levels are known.

8 LDSA (2017) *Guidance notes for the design of straight shafted bored piles in London Clay*. LDSA

It would be prudent, following excavation and inspection, to protect any formation levels with a concrete blinding.

The basement excavation should result in the foundations being extended below the depth that may be affected by trees, but this should be checked once levels are known and any root growth encountered at formation level should be removed.

8.5 Shallow Excavations

On the basis that all foundations bypass any made ground and soft clay layers then moderate width pad or strip foundations, bearing in the firm orange-brown silty sandy clay of the Claygate Member may be designed to apply a net allowable bearing pressure of 125 kN/m^2 below the level of the proposed basement. This value provides an adequate factor of safety against bearing capacity failure and should ensure that settlement remains within normal tolerable limits.

If deeper excavations are considered or if excavations are to remain open for prolonged periods it is recommended that provision be made for battered side slopes or lateral support. Where personnel are required to enter excavations, a risk assessment should be carried out and temporary lateral support or battering of the excavation sides considered in order to comply with normal safety requirements.

Inflows of groundwater into shallow excavations are not generally anticipated, although seepages may be encountered from perched water tables within the made ground, particularly within the vicinity of existing foundations, although such inflows should be suitably controlled by sump pumping.

8.6 Effect of Sulphates

Chemical analyses of selected soil samples have revealed low concentrations of soluble sulphate, corresponding to Class DS-1 and AC-1 of Table C2 of BRE Special Digest 1:2005. The guidelines contained in the above digest should be followed in the design of any new foundation concrete.

8.7 Site Specific Risk Assessment

The desk study has indicated that the site has not had a contaminative history, having been occupied by residential properties throughout its developed history and has been set in an area dominated by residential streets. Therefore no sources of contamination have been identified. The results of the contamination testing have however identified elevated concentrations of lead within two samples of made ground. Three samples were found to contain marginally elevated concentrations of chromium.

The exact source of the contamination is unknown. However, the made ground was noted as containing variable amounts of extraneous material and it is therefore likely that a fragment of such material was present within the samples tested, accounting for the elevated concentration. Information on Urban Soil Chemistry provided by the BGS also indicates that background concentrations for lead and chromium in the vicinity of the site are on average 280 mg/kg and 79 mg/kg respectively, such that a significant proportion of the measured concentrations could be the result of residual airborne sources.

Lead compounds are relatively immobile and unlikely to be in a soluble form and are considered to be non-volatile or of a low volatility. The contamination does not therefore present a significant vapour risk or a significant risk of leaching and migration within any perched groundwater within the made ground. As the site is underlain by the London Clay, classified as Unproductive Strata, a risk to groundwater has not been identified.

8.8 Waste Disposal

Under the European Waste Directive, waste is classified as being either Hazardous or Non-Hazardous and landfills receiving waste are classified as accepting hazardous or non-hazardous wastes or the non-hazardous sub-category of inert waste in accordance with the Waste Directive. Waste classification is a staged process and this investigation represents the preliminary sampling exercise of that process. Once the extent and location of the waste that is to be removed has been defined, further sampling and testing may be necessary. The results from this ground investigation should be used to help define the sampling plan for such further testing, which could include WAC leaching tests where the totals analysis indicates the soil to be a hazardous waste or inert waste from a contaminated site. It should however be noted that the Environment Agency guidance WM3[9] states that landfill WAC analysis, specifically leaching test results, must not be used for waste classification purposes.

Any spoil arising from excavations or landscaping works, which is not to be re-used in accordance with the CL:AIRE[10] guidance, will need to be disposed of to a licensed tip. Waste going to landfill is subject to landfill tax at either the standard rate of £91.35 per tonne (about £219 per m^3) or at the lower rate of £2.90 per tonne (roughly £6.95 per m^3) be disposed of to a licensed tip. Waste going to landfill is subject to landfill tax at either the standard rate of £82.60 per tonne (about £150 per m^3) or at the lower rate of £2.60 per tonne (roughly £5 per m^3). However, the classifications for tax purposes and disposal purposes differ and currently all made ground and topsoil is taxable at the 'standard' rate and only naturally occurring soil and stones, which are accurately described as such in terms of the 2011 Order, would qualify for the 'lower rate' of landfill tax.

Based upon on the technical guidance provided by the Environment Agency it is considered likely that the soils encountered during this ground investigation, as represented by the three chemical analyses carried out, would be generally classified as follows;

Soil Type	Waste Classification (Waste Code)	WAC Testing Required Prior to Landfill Disposal?
Made ground	Non-hazardous (17 05 04)	No
Natural soils	Inert (17 05 04)	Should not be required but confirm with receiving landfill

Under the requirements of the European Waste Directive all waste needs to be pre-treated prior to disposal. The pre-treatment process must be physical, thermal, chemical or biological, including sorting. It must change the characteristics of the waste in order to reduce its volume, hazardous nature, facilitate handling or enhance recovery. The waste producer can carry out the treatment, but they will need to provide documentation to prove that this has been carried out. Alternatively, the treatment can be carried out by an approved contractor. The Environment Agency has issued a position paper[11] which states that in certain circumstances, segregation at source may be considered as pre-treatment and thus excavated material may

9 Environment Agency 2015. *Guidance on the classification and assessment of waste.* Technical Guidance WM3 First Edition
10 CL:AIRE March 2011. *The Definition of Waste: Development Industry Code of Practice* Version 2
11 Environment Agency 23 Oct 2007 *Regulatory Position Statement Treating non-hazardous waste for landfill - Enforcing the new requirement*

not have to be treated prior to landfilling if the soils can be segregated onsite prior to excavation by sufficiently characterising the soils insitu prior to excavation.
The above opinion with regard to the classification of the excavated soils is provided for guidance only and should be confirmed by the receiving landfill once the soils to be discarded have been identified.

The local waste regulation department of the Environment Agency (EA) should be contacted to obtain details of tips that are licensed to accept the soil represented by the test results. The tips will be able to provide costs for disposing of this material but may require further testing.

Part 3: GROUND MOVEMENT ANALYSIS

This section of the report comprises an analysis of the ground movements arising from the proposed basement and foundation scheme discussed in Part 2 and the information obtained from the investigation, presented in Part 1 of the report.

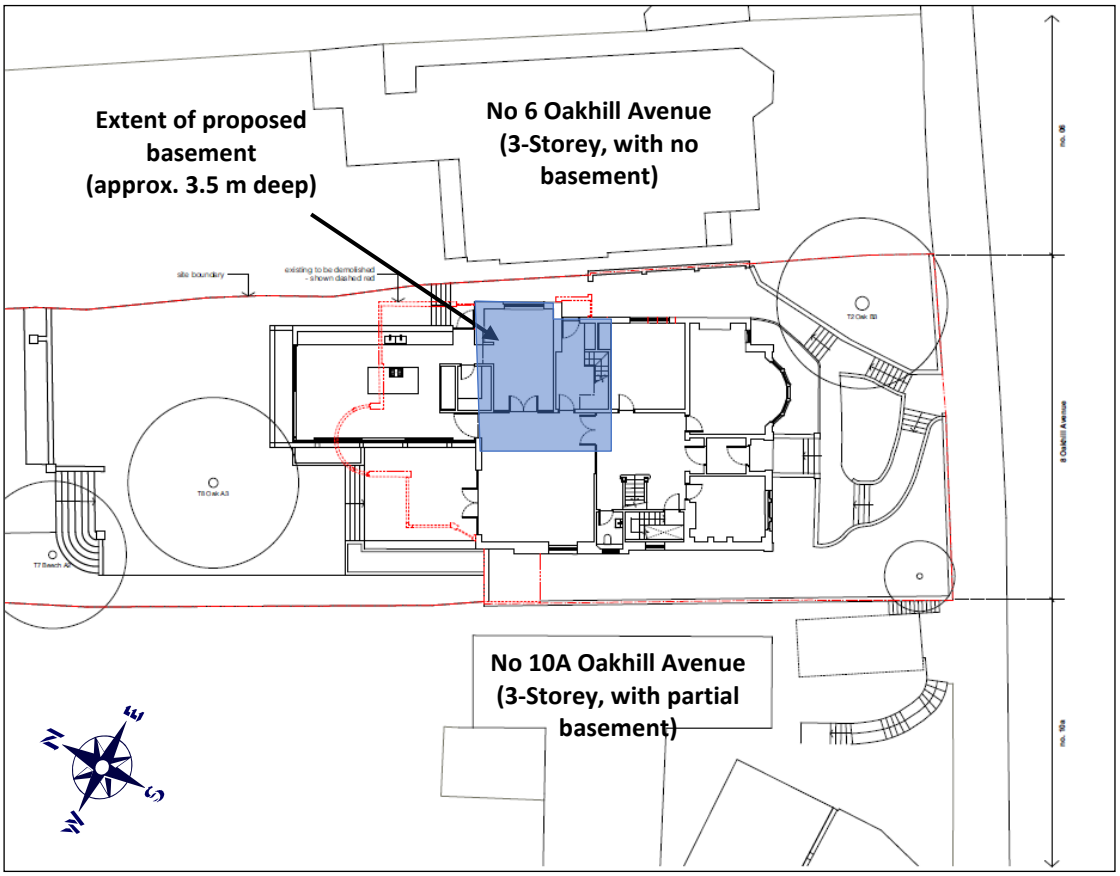
9.0 INTRODUCTION

The sides of an excavation will move to some extent regardless of how they are supported. The movement will typically be both horizontal and vertical and will be influenced by the engineering properties of the ground, groundwater level and flow, the efficiency of the various support systems employed during underpinning and the efficiency or stiffness of any support structures used.

An analysis has been carried out of the likely movements arising from the proposed excavation and the results of this analysis have been used to predict the effect of these movements on surrounding structures.

9.1 Basis of Ground Movement Assessment

A plan showing the nearby sensitive structures is shown below.



Sensitive structures relevant to this assessment include No 6 Oakhill Avenue and No 10A Oakhill Avenue, to the east-northeast and southwest respectively.

The exact nature of the foundations of the adjoining structures is not known and a cautious approach has therefore been adopted with the assumption that the buildings are supported on relatively shallow spread foundations, similar to those exposed on site, at a depth of 1.00 m (9.00 m TBM). The partial basement beneath the front part of No 10A, is at a similar depth to the proposed basement and at sufficient distance to be outside the zone of influence and, such that it will not be affected and has not therefore been explicitly included within the analysis.

9.2 Construction Sequence

Consideration is being given to the redevelopment of the existing building to include a single level basement, which will extend to a depth of approximately 3.50 m (approx. 6.50 m TBM) beneath the rear part of the existing house.

From the information provided, it is understood that a mixture of traditional mass concrete underpinning and reinforced concrete retaining walls will be used to support the proposed excavations.

The following sequence of operations has been derived to enable analysis of the ground movements around the basement, both during and after construction, and is based on the information provided by the structural engineer.

Essentially the sequence of works may be considered as two groups of activities, the first comprising the short-term temporary works, whilst the second represents the construction of the permanent works.

The detail of the support provided to adjacent walls is beyond the scope of this report at this stage and the structural engineer will be best placed to agree a methodology with the piling contractor(s) once appointed. However, it is assumed that propping of all walls will take place throughout the temporary and permanent works.

9.2.1 Temporary Support to Underpinned Walls

It is understood that underpinning will be undertaken in a 'hit and miss' sequence, in stages to be agreed with the temporary works engineer and under party wall agreement.

Underpinning should generally be undertaken in short sections not exceeding 1.00 m to 1.20 m in length, with no adjacent pin to be excavated until a minimum of 48 hours after the adjacent pin has been cast and dry-packed placed, with the sides of the excavation adequately shored and propped.

The underpins will be adequately laterally propped and sufficiently dowelled together, and the concrete will be cast and adequately cured prior to excavation of the basement and removal of the formwork and supports. It is assumed that the corners of the excavation will be locally stiffened by cross-bracing or similar and that the new retaining walls will not be cantilevered at any stage during the construction process.

It is assumed that adequate temporary propping of the new retaining walls, particularly at the top level, will occur at all times during excavation of the proposed basement and will remain in place until the construction of permanent concrete floor slabs.

9.2.2 Temporary Support to Reinforced Concrete Retaining Walls

Reinforced concrete retaining walls will be used to form part of the proposed basement and will be undertaken in an underpinning type 'hit and miss' sequence. All temporary shoring and propping is to be inspected by a suitably qualified person.

The retaining walls will be adequately laterally propped and sufficiently dowelled together, and the concrete will be cast and adequately cured prior to excavation of the basement and removal of the formwork and supports. It is assumed that the corners of the excavation will be locally stiffened by cross-bracing or similar and that the new retaining walls will not be cantilevered at any stage during the construction process.

It is assumed that adequate temporary propping of the new retaining walls, particularly at the top level, will occur at all times during excavation of the proposed basement and will remain in place until the construction of permanent concrete floor slabs.

9.2.3 Permanent Works

When the final excavation depths have been reached, the permanent works will be formed, which are likely to comprise reinforced concrete walls with a drained cavity lining the inside of the newly formed retaining walls.

Reinforced concrete will be used for floor slabs and it is anticipated that the floor slabs, which will act as permanent props, will be constructed lowest level first and when each floor has achieved adequate strength, the temporary props will be removed, and the subsequent walls and floors cast until the structure is complete.

10.0 GROUND MOVEMENTS

An assessment of ground movements within and surrounding the excavation has been undertaken using the X-Disp and P-Disp computer programs licensed from the OASYS suite of geotechnical modelling software from Arup. These programs are commonly used within the ground engineering industry and are considered to be appropriate tools for this analysis.

The X-Disp and P-Disp programs have been used to predict ground movements likely to arise from the construction of the proposed basement. This includes the heave / settlement of the ground (vertical movement) and the lateral movement of soil behind the proposed retaining walls (horizontal movement).

For the purpose of these analyses, the corners have been defined by x and y coordinates, with the x-direction parallel with the site boundaries, whilst the y-direction is parallel with Oakhill Avenue. Vertical movement is in the z-direction.

For this movement analysis, the proposed basement has been modelled as a polygon, with maximum dimensions of 8.00 m by 7.50 m.

It is understood that propping will be provided during the construction of the basement and in the permanent condition, such that the walls can be considered to be stiff for the purpose of the ground movement modelling.

Input and output data of all the analyses are included within the appendix.

10.1 P-Disp Model

Unloading of the Claygate Member and underlying London Clay will take place as a result of the excavation of the proposed basement and the reduction in vertical stress will cause heave to take place. Undrained soil parameters have been used to estimate the potential short-term movements, which include the “immediate” or elastic movements as a result of the basement excavation. Drained parameters have been used to provide an estimate of the total movement.

The elastic analysis requires values of soil stiffness at various levels to calculate displacements. Values of stiffness for the soils at this site are readily available from published data[12] and a well-established method has been used to provide estimated values. Relationships of E_u = 750 C_u and E' = 0.75 E_u for the cohesive soils and 2000 x SPT N (estimated from soil description) for granular soils have been used to obtain values of Young's modulus.

The excavation of an approximately 3.50 m thickness of soil for the proposed basement will result in a net unloading of around 60 kN/m^2.

The soil parameters used in this analysis and tabulated below have been primarily derived from the onsite investigation but supplemented with the data from the nearby GEA investigations and BGS data. For the purpose of the assessment ground level has been set at proposed ground floor level of 10.0 m TBM.

Stratum	Depth Range (m)	Level (m TBM)	Cu (KN/m^2)	Eu (KN/m^2)	E'(KN/m^2)
Made Ground	GFL to 3.0	10.0 to 7.0	-	-	10,000
Claygate Member	3.0 to 8.5	7.0 to 1.5	60 to 75	45,000 to 56,250	33,750 to 42,187
London Clay	8.5 to 16.0*	1.5 to -6.0*	75 to 100	56,250 to 75,000	42,187 to 56,250
	16.0 to 50.0	-6.0 to -40.0	100 to 270	75,000 to 202,500	56,250 to 151,875

*Maximum depth of investigation.

A rigid boundary for the analysis has been set within the London Clay at a depth of 50.00 m below ground level. An increase in cohesion of 5 kN/m^2 for each metre of depth has been adopted to provide a conservative estimate of the likely strength profile within the London Clay below the maximum depth investigated.

Information provided by the consulting engineer indicates that the loads on the proposed underpinning will result in a bearing pressure of approximately 75 kN/m^2, with a slab loading of approximately 35 kN/m^2.

An assessment of the potential behaviour of these foundations has been included within the analysis, with a staged approach to the modelling adopted to reflect the change in the way the loads are applied during the course of construction.

10.2 Ground Movements Surrounding the Basement

The magnitude of the settlement resulting from the proposed basement construction will be controlled to a large extent by the quality of workmanship of the underpins and by the existing building that is likely to provide additional rigidity.

For the purpose of this assessment a high quality of construction has been assumed, with continued loading from the existing building and propping of the proposed excavations, such that potential movements are expected to be kept to a minimum.

10.2.1 Installation Phase

For the X-Disp analysis, the installation curves for the panel-like planar diaphragm wall have been adopted as most appropriate for the soil movement relationship for walls installed by

[12] Burland JB, Standing, JR, and Jardine, FM (2001) *Building response to tunnelling, case studies from construction of the Jubilee Line Extension.* CIRIA Special Publication 200

underpinning techniques. The short-term behaviour of the proposed underpinning under vertical load during the early stages of construction have been obtained from P-Disp and imported into X-Disp, to enable a damage assessment to be undertaken of all the potential movements.

10.2.2 Excavation Phase

Settlement of the soil behind the new retaining wall may occur due to the excavation in front of the wall causing the wall to deflect. The walls will be subject to a continued vertical loading from the structure above, which will also act as additional support at ground level, and will be fully propped on exposure, such that potential deflections during the excavation phase are not considered to be significant. However, as reinforced concrete retaining walls will be adopted for part of the proposed basement, the ground movement curves for 'excavation in front of a stiff wall in stiff clay' have been adopted to provide a conservative assessment and account for any potential movements.

In order to address the potential impact of the proposed excavations, the vertical movements obtained from the excavation and subsequent long-term stages of the P-Disp analysis have been also imported into X-Disp to enable a damage assessment to be undertaken of all the potential movements.

10.2.3 Results

The movements predicted by the combined X-Disp and P-Disp analysis for the new basement extension are summarised in the table below; the results are presented below, and in subsequent tables, to the degree of accuracy required to allow predicted variations in ground movements around the structure to be illustrated, but may not reflect the anticipated accuracy of the predictions.

Stage 1 (Installation of proposed retaining walls)

Phase of Works	Wall Movement (mm)*	
	Vertical Heave / Settlement	Horizontal Movement
Immediately behind wall	1.0 to 4.0	<1.5
At 5 m from wall	<1.0	<0.5
At 10 m from wall	<1.0	<0.5

**A positive number denotes settlement, whilst a negative number denotes heave.*

Stage 2 (Bulk excavation)

Phase of Works	Wall Movement (mm)*	
	Vertical Heave / Settlement	Horizontal Movement
Immediately behind wall	1.0 to 3.0	4.0 to 5.0
At 5 m from wall	<1.0	<2.0
At 10 m from wall	<1.0	<1.0

**A positive number denotes settlement, whilst a negative number denotes heave.*

Stage 3 (Application of basement slab loading)

Phase of Works	Wall Movement (mm)*	
	Vertical Heave / Settlement	Horizontal Movement
Immediately behind wall	1.0 to 4.0	4.0 to 5.0
At 5 m from wall	<1.0	<1.0
At 10 m from wall	<1.0	<1.0

**A positive number denotes settlement, whilst a negative number denotes heave.*

Stage 4 (Total movements)

Phase of Works	Wall Movement (mm)*	
	Vertical Heave / Settlement	Horizontal Movement
Immediately behind wall	1.0 to 5.0	2.0 to 5.0
At 5 m from wall	<1.0	<2.0
At 10 m from wall	<1.0	<1.0

**A positive number denotes settlement, whilst a negative number denotes heave.*

The estimated movements are considered to represent a worst-case scenario, particularly as the movements resulting from basement excavation will be minimised due to control of the propping in the temporary works and a regime of monitoring.

10.3 Ground Movements within the Excavation (Heave / Settlement)

10.3.1 Results

The P-Disp analysis indicates that short-term heave resulting from the basement excavation is likely to be in the order of 5.0 mm, which would be expected to be complete by the end of the excavation and construction period, whilst up to 3.0 mm of settlement is anticipated on the proposed underpinning.

In the long term, following completion of the proposed basement, a further 1.0 mm of heave or settlement is estimated, as a result of long term swelling or consolidation of the underlying clay soils.

The predicted movements are summarised in the table below.

Location	Movements (mm) Heave is -ve and Settlement +ve)			
	Short-term			Total (Stage 4)
	Stage 1	Stage 2	Stage 3	
Centre of proposed basement	-	-4.0 to -5.0	-1.0 to -2.0	-2.0 to -3.0
proposed Underpinning	2.0 to 3.0	1.0 to 2.0	1.0 to 3.0	1.0 to 4.0

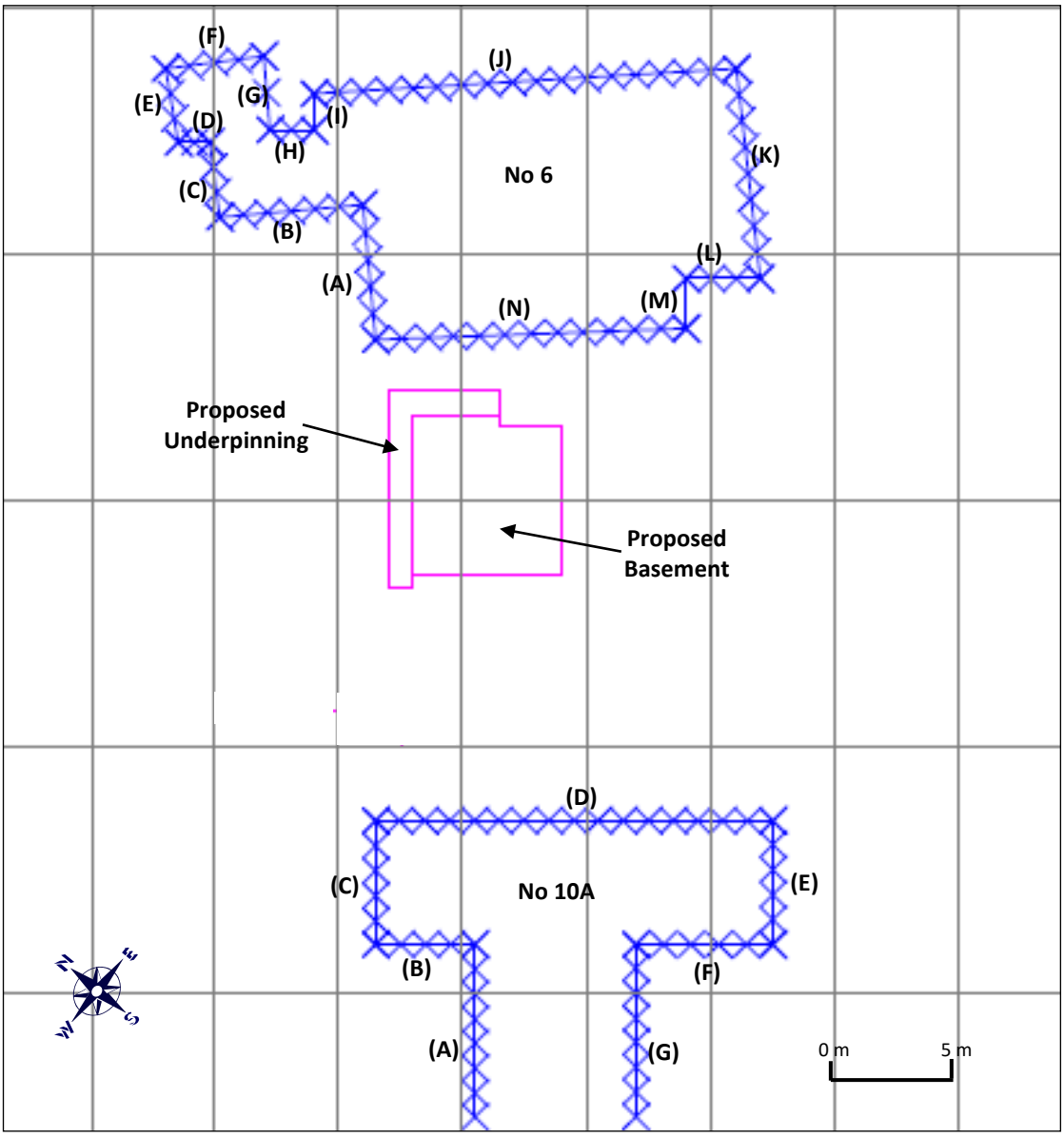
Potential heave pressures are typically taken to equate to around 50 % of the total unloading, assuming a linear relationship between heave movement and the pressure applied to the underside of the slab, which in this case is taken to be inflexible. However, if there is some flexibility in the slab, this value would reduce as the slab deflects and it would be reasonable to assume that the heave pressure would reduce to around 35 % of the unloading pressure.

11.0 DAMAGE ASSESSMENT

In addition to the above assessment of the likely movements that will result from the proposed development, any neighbouring buildings within the zone of influence of the excavations are considered to be sensitive structures, requiring Building Damage Assessments, on the basis of the classification given in Table 6.4 of CIRIA report C760[13].

The sensitive structures of Nos 6 and 10A Oakhill Avenue have been modelled as a series of displacement lines, as detailed on the plan below, along which the damage assessment has been undertaken.

As per the comments in Section 9.1, a foundation depth of approximately 1.00 m below existing ground level has been assumed for the purpose of the analysis.



[13] Gaba, A, Hardy, S, Powrie, W, Doughty, L and Selemetas, D (2017) Embedded *retaining walls – guidance for economic design CIRIA* Report C760

11.1 Damage to Neighbouring Structures

The combined movements resulting from underpinning and excavation of the proposed basement, calculated using the X-Disp and P-Disp modelling software have been used to carry out an assessment of the likely damage to adjacent properties and the results are summarised in the table below.

The building damage reports for sensitive structures highlighted above are included in the appendix and indicate that the damage to the adjoining and nearby structures due to short and total movements for each stage of the proposed development do not exceed Category 0 (negligible), with the exception of a single elevation of No 6 Oakhill Avenue, which falls into Category 1 (very slight) during the second and third construction stages, as detailed in the table below.

Sensitive Structure	Ref No / Elevation	Max Tensile Strain (%)				Maximum Category of Damage*
		Stage 1	Stage 2	Stage 3	Stage 4	
No 6 Oakhill Avenue	A	0.013	**0.051**	**0.053**	0.043	**Category 1 – Very Slight**

*From Table 6.4 of C760: Classification of visible damage to walls.

The results discussed above are based on individual building lines, or walls, that in some instances, have been further divided up within the analysis into a series of segments that are assumed to be able to move independently of one another, with the most critical segment determining the result for the entire wall. In reality, this is unlikely to be the case as the walls will behave as single stiff elements that are also joined continuously with the rest of the structure.

The results therefore provide a conservative estimate of the behaviour of each of the sensitive structures and overestimate the degree of damage, although they provide a useful indication of the most critical structures within the adjoining properties.

11.2 Monitoring of Ground Movements

The predicted ground movements should be checked by the monitoring of the adjacent properties and structures. The structures to be monitored during the construction stages should include the existing property and the neighbouring structure assessed above.

The precise monitoring strategy will be developed at a later stage and it will be subject to discussions and agreements with the owners of the adjacent properties and structures. Contingency measures will be implemented if movements of the adjacent structures exceed predefined trigger levels. Both contingency measures and trigger levels will need to be developed within a future monitoring specification for the works.

12.0 GMA CONCLUSIONS

The ground movement analysis has concluded that the predicted damage to the neighbouring properties would generally be ‘Negligible’ to ‘Very Slight’.

On this basis, the damage that has been predicted to occur as a result of the construction the proposed basement falls within the limits acceptable to the London Borough of Camden assuming that the careful control is taken during construction of the proposed excavations to ensure that no excessive movements occur that would lead to damage in excess of these limits.

In practice, underpinning of the existing foundations and the subsequent excavation of the proposed basement, will be staged processes and will take place over a number of weeks. This will provide an opportunity for the ground movements during and immediately after the installation of the retaining walls to be measured and the data acquired can be fed back into the design and compared with the predicted values. Such a comparison will allow the ground model to be reviewed and the predicted wall movements to be reassessed prior to the main excavation taking place, so that propping arrangements can be adjusted if required.

Whilst it is recommended that movement monitoring is carried out on all structures prior to and during the proposed excavation and construction, it is unlikely that specification of these works will be required as part of the planning conditions but may be required in order to satisfy party wall awards.

Part 4: BASEMENT IMPACT ASSESSMENT

This section of the report evaluates the direct and indirect implications of the proposed project, based on the findings of the previous screening and scoping, site investigation and ground movement assessment.

13.0 INTRODUCTION

The screening identified a number of potential impacts. The desk study and ground investigation information has been used below to review the potential impacts, to assess the likelihood of them occurring and the scope for reasonable engineering mitigation.

13.1 Potential Impacts

The table below summarises the previously identified potential impacts and the additional information that is now available from the ground investigation in consideration of each impact.

Potential Impact	Site Investigation Conclusions
The site is located directly above an aquifer.	As no significant sand layers were established within the formation the Claygate Member will behave as Unproductive Strata as it has been established that it is predominantly clay.
The proposed basement may extend beneath the water table surface.	The Claygate Member beneath the site cannot support a water table as it is predominantly clay and the strata therefore cohesive. Monitored groundwater levels are most likely to reflect collected pockets of perched groundwater.
The site is within 100 m of a watercourse, well (used/ disused) or potential spring line	The site is about 30 m north of a spring line to the former River Westbourne, with the former course of river located approximately 50 m to the southeast of the site. Headwaters or lines of springs rose/rise at the boundary between the permeable Bagshot and the Claygate. The former Westbourne would have been perched on the Claygate Member clays near the site. Excavations within the clay couldn't impact on flows to spring lines as they are fed by groundwater within the overlying Bagshot. Therefore this is not considered to be an issue to the site or the proposed development and in any case a continuous groundwater level has not been encountered below the site.
The development neighbours land which has a slope angle greater than 7° The Claygate Member is the shallowest strata at the site and as such may be subject to seasonal shrink-swell.	New foundations will however need to be designed in accordance with NHBC guidelines to protect from future shrinking and swelling associated with tree removal / growth
The development is likely to increase the differential depth of foundations relative to neighbouring properties which may result in structural damage.	The adjoining properties are not understood to include extensive basement structures, such that the proposed basement is likely to extend below the depth of the existing foundations. However, the results of the ground movement analysis (Part 3.0) indicate that any building damage is unlikely to exceed acceptable limits.

The results of the site investigation have therefore been used below to review the remaining potential impacts, to assess the likelihood of them occurring and the scope for reasonable engineering mitigation.

The site is underlain by a Secondary 'A' Aquifer and the basement could interfere with the groundwater flow regime

The investigation has indicated that the site is underlain by the Claygate Member which is designated a Secondary 'A' Aquifer on the basis that in some areas permeable sand layers are present. In the absence of these sand layers the formation is predominantly clay and does not behave as an aquifer. The basement is proposed to extend to depth of about 3.50 m below the existing ground floor level and it is possible that it could extend beneath a water table provided permeable sand layers are present. In the absence of these sand layers the Claygate Member clay strata could not support a water table. Monitored groundwater levels are most likely to reflect collected pockets of perched groundwater.

On the basis of all of the above, it is still concluded that the proposed basement structure will not have an impact on the local hydrological or hydrogeological setting, it is, however, proposed to carry out a programme of ongoing groundwater monitoring up until the construction period.

The site is located 100 m of a spring line and 50 m from a former river course

The site is approximately 30 m north of a spring line to the former River Westbourne, with the former course of the river located approximately 50 m to the southeast of the site. Headwaters or lines of springs rose/rise at the boundary between the permeable Bagshot and the Claygate. The former Westbourne would have been perched on the Claygate Member clays near the site. Excavations within the clay will not impact on flows to spring lines as they are fed by groundwater within the overlying Bagshot. Furthermore, the site is not shown to be in an area at risk of flooding. Therefore, this is not considered to be an issue to the site or the proposed development and in any case a continuous groundwater level has not been encountered below the site.

Increase in the differential depth of neighbouring foundations

The stability of neighbouring structures will be maintained using appropriate measures incorporating underpinning to form the new retaining walls. New structures will be designed to consider the differential footing depths and potential for differential movement.

An analysis of the potential ground movements resulting from construction of the proposed basement is included in Part 3 of this report and has concluded that the predicted damage to the neighbouring properties would fall well within the acceptable limits.

13.2 BIA Conclusion

A Basement Impact Assessment has been carried out following the information and guidance published by the London Borough of Camden.

It is concluded that the proposed development is unlikely to result in any specific land or slope stability issues.

13.3 Non-Technical Summary of Evidence

This section provides a short summary of the evidence acquired and used to form the conclusions made within the BIA.

13.3.1 Screening

The following table provides the evidence used to answer the surface water flow and flooding screening questions.

Question	Evidence
1. Is the site within the catchment of the pond chains on Hampstead Heath?	Topographical maps acquired as part of the desk study and Figures 12 and 14 of the Arup report
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	The proposed building layout overlaid on the existing site plan included in appendix provides an illustration showing no increase in hardstanding
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	
4. Will the proposed basement development result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream watercourses?	
5. Will the proposed basement result in changes to the quantity of surface water being received by adjacent properties or downstream watercourses?	
6. Is the site in an area known to be at risk from surface water flooding such as South Hampstead, West Hampstead, Gospel Oak and Kings Cross, or is it at risk of flooding because the proposed basement is below the static water level of a nearby surface water feature?	Flood risk maps acquired from the Environment Agency as part of the desk study, Figure 15 of the Arup report, the Camden Flood Risk Management Strategy dated 2013 and the North London Strategic Flood Risk Assessment dated 2008.

The following table provides the evidence used to answer the subterranean (groundwater flow) screening questions.

Question	Evidence
1a. Is the site located directly above an aquifer?	Aquifer designation maps acquired from the Environment Agency as part of the desk study and Figures 3, 5 and 8 of the Arup report.
1b. Will the proposed basement extend beneath the water table surface?	Previous nearby GEA investigations and BGS archive borehole records.
2. Is the site within 100 m of a watercourse, well (used/ disused) or potential spring line?	Topographical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report.
3. Is the site within the catchment of the pond chains on Hampstead Heath?	Topographical maps acquired as part of the desk study and Figures 12 and 14 of the Arup report
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	The proposed building layout overlaid on the existing site plan included in appendix provides an illustration showing no increase in hardstanding.
5. As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	The details of the proposed development do not indicate the use of soakaway drainage.
6. Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than, the mean water level in any local pond or spring line?	Topographical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report.

The following table provides the evidence used to answer the slope stability screening questions.

Question	Evidence
1. Does the existing site include slopes, natural or manmade, greater than 7°?	Topographical maps and Figures 16 and 17 of the Arup report and confirmed during a site walkover

Question	Evidence
2. Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7°?	The details of the proposed development provided do not include the re-profiling of the site to create new slopes
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	Topographical maps and Figures 16 and 17 of the Arup report
4. Is the site within a wider hillside setting in which the general slope is greater than 7°?	
5. Is the London Clay the shallowest strata at the site?	Geological maps and Figures 3, 5 and 8 of the Arup report
7. Is there a history of seasonal shrink-swell subsidence in the local area and / or evidence of such effects at the site?	Knowledge on the ground conditions of the area were used to assess this
8. Is the site within 100 m of a watercourse or potential spring line?	Topographical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report
9. Is the site within an area of previously worked ground?	Geological maps and Figures 3, 5 and 8 of the Arup report
10. Is the site within an aquifer?	Aquifer designation maps acquired from the Environment Agency as part of the desk study and Figures 3, 5 and 8 of the Arup report.
11. Is the site within 50 m of Hampstead Heath ponds?	Topographical maps acquired as part of the desk study and Figures 12 and 14 of the Arup report
12. Is the site within 5 m of a highway or pedestrian right of way?	Aerial photography and site plans confirmed that the site is within 5 m of Oakhill Avenue
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	Records of basements being present below neighbouring properties confirmed the position of the proposed basement relative the neighbouring properties. Archive building records have also been consulted
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	Maps and plans of infrastructure tunnels were reviewed, in addition to online infrastructure maps, showing exclusions zones, made available by Transport for London, as shown in Section 2.3 of this report.

13.3.2 Scoping and Site Investigation

The questions in the screening stage that there were answered 'yes', were taken forward to a scoping stage and the potential impacts discussed in Section 4.0 of this report, with reference to the possible impacts outlined in the Arup report.

A ground investigation has been carried out, which has allowed an assessment of the potential impacts of the basement development on the various receptors identified from the screening and scoping stages. Principally the investigation aimed to establish the ground conditions, including the groundwater level, the engineering properties of the underlying soils to enable suitable design of the basement development and the configuration of existing party wall foundations. The findings of the investigation are discussed in Section 5.0 of this report and summarized in both Section 7.0 and the Executive Summary.

14.0 OUTSTANDING RISKS AND ISSUES

This section of the report aims to highlight areas where further work is required as a result of limitations on the scope of this investigation, or where issues have been identified by this investigation that warrant further consideration. The scope of risks and issues discussed in this section is by no means exhaustive but covers the main areas where additional work is considered to be required.

The ground is a heterogeneous natural material and variations will inevitably arise between the locations at which it is investigated. This report provides an assessment of the ground conditions based on the discrete points at which the ground was sampled, but the ground conditions should be subject to review as the work proceeds to ensure that any variations from the Ground Model are properly assessed by a suitably qualified person.

As discussed throughout the report, perched water is likely to be encountered during the basement excavation, although the findings of the investigation indicate that potential inflows are unlikely to be significant and should be adequately dealt with through sump pumping. However, groundwater monitoring should be continued, and trial excavations should be considered to assess the extent of inflows to be expected within the proposed basement excavations.

It is recommended that heave movements are checked by further analysis once the loadings and final levels are known.

If trees are to be planted in close proximity to the new buildings founding depths should be deepened in accordance with NHBC guidelines and using the mature height of the trees.

The investigation has not identified the presence of any significant contamination and as the majority of the made ground will be removed from this site through the excavation of the proposed basement, remedial measures should not be required, other than where areas of soft landscaping are to be formed. However, as with any site there is a potential for further areas of contamination to be present within the made ground beneath parts of the site not covered by the investigation it is recommended that a watching brief is maintained during any groundworks for the proposed new foundations and that if any suspicious soils are encountered that they are inspected by a geoenvironmental engineer and further assessment may be required.

The findings of the ground movement analysis and damage assessment should be reviewed once the design proposals have been finalised, particularly if any changes are made to the proposed basement construction.

These items should be drawn to the attention of prospective contractors and further investigation will be required or sufficient contingency should be provided to cover the outstanding risk.

APPENDIX – PART 1

Site Plan

Borehole Record

BGS Borehole record

Trial Pit Records

Geotechnical Laboratory Test Results

SPT & Cohesion / Depth Graph

Penetrometer / Depth Graph

Chemical Analyses (Soil)

Generic Risk Based Screening Values

Groundwater Monitoring Records

Envirocheck Report Summary

Historical Maps

Preliminary UXO Risk Assessment Report

Utility Services

APPENDIX – PART 2

Ground Movement Assessment

SOIL DISPLACEMENT MODEL RESULTS

P-DISP ANALYSIS

Stage 1 - Underpinning Construction
(Contour Plots and Tabular Input)

Stage 2 - Bulk Excavation
(Contour Plots and Tabular Input)

Stage 3 – Application of basement slab loading
(Contour Plots and Tabular Input)

Stage 4 - Total Movement
(Contour Plots and Tabular Input)

X-DISP ANALYSIS

Stage 1 - Wall Installation
(Contour Plots and Tabular Input)

Stage 2 - Bulk Excavation
(Contour Plots and Tabular Input)

Stage 3 – Application of basement slab loading
(Contour Plots and Tabular Input)

Stage 4 -Total Movement
(Contour Plots and Tabular Input)

BUILDING DAMAGE ASSESSMENT (X-DISP)

Tabular Output of Results

GEA

www.gea-ltd.co.uk

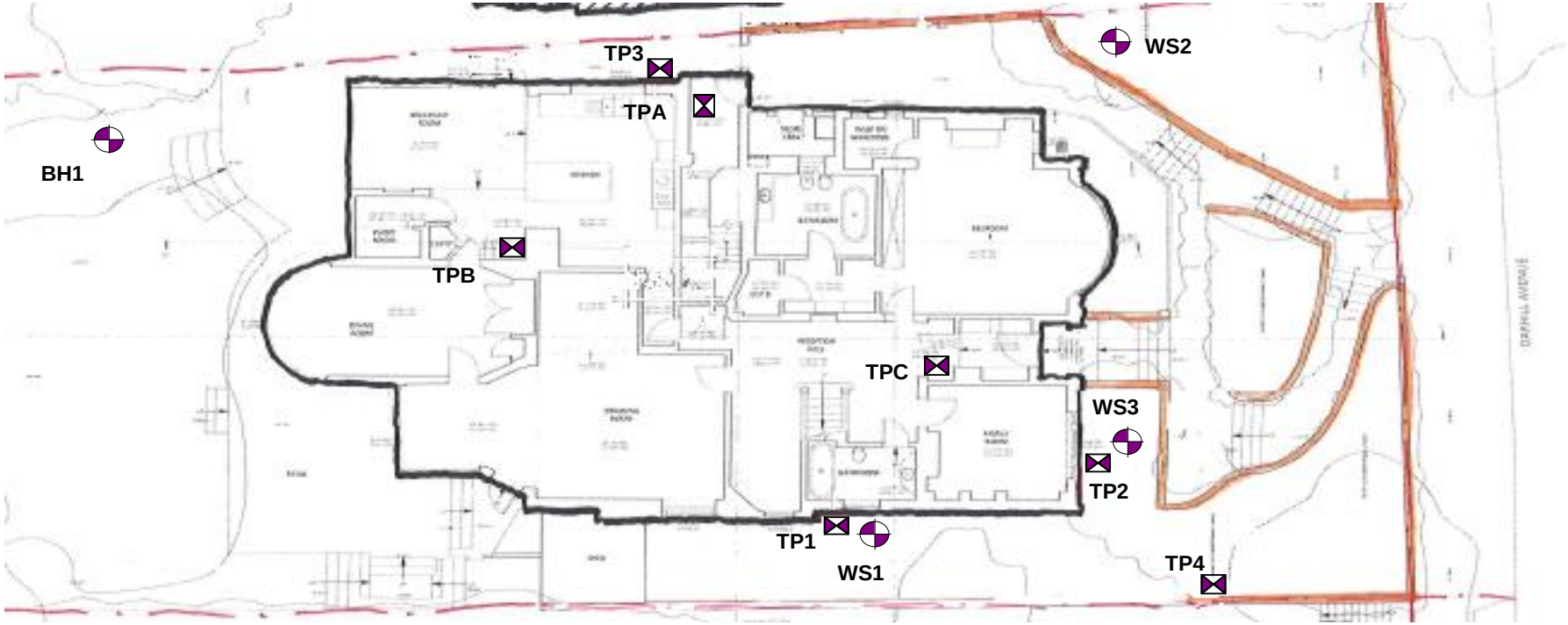
Herts | 01727 824666 Notts | 01509 674888

Site Plan

Site	8 Oakhill Avenue, London, NW3 7RE
Client	N. Abrams
Engineer	Price and Myers

Job Number J19232

Sheet 1 / 1



GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
8 Oakhill Avenue, London, NW3 7RE				**BH1**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J19232	09-09-19 11-09-19	8.88	E 525,703.0 N 185,731.0	
Client		Engineer		Sheet
N. Abrams		Price and Myers		1 of 2

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				8.68		0.20	TOPSOIL. Orange brown slightly gravelly slighlty sandy silty clay with rare rootlets. Sand is fine. Gravel is fine and medium subangular to subrounded.	
0.20	D1						Firm to soft light orange brown mottled yellowish brown sandy silty CLAY. Sand is fine.	
1.00-1.45	U2	21 blows				(1.80)		
1.45	SDS3							
1.70	D4			6.88		2.00		
2.00-2.45	SPT5	1,2/3,3,3,2 N60 = 12					Stiff friable mottled yellowish brown and brown sandy silty CLAY. Sand is fine. 2.00 m: Slightly gravelly	
2.70	D6						2.70 m: Mottled dark brown	
3.00-3.45	U7	18 blows				(3.00)		
3.45	SDS8							
3.70	D9						3.70 m: Slightly gravelly mottled orange brown reddish brown and light grey	
4.00-4.45	SPT10	1,2/2,3,3,2 N60 = 11						
4.30	W16							
4.70	D11			3.88		5.00	4.70 m: Slightly gravelly mottled orange brown reddish brown and light grey	
5.00-5.45	U12	20 blows	1				Firm friable mottled light brown and yellowish brown sandy silty CLAY. Sand is fine.	
5.45	SDS13					(1.00)		
				2.88		6.00		
6.00	D14						Stiff light reddish brown mottled orange and bluish grey silty CLAY.	
6.50-6.95	SPT15	1,2/1,3,3,3 N60 = 11				(1.50)		
				1.38		7.50		
7.50	D17						Very stiff to stiff dark grey sandy silty CLAY. Sand is fine.	

Boring Progress and Water Observations

Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

Services inspection pit excavated to 1.00 m for 1.5 hrs.
Borehole completed at 15.00 m.

All dimensions in metres Scale 1:50	Method/ Plant Used Cable Percussion	Logged By SZ

Report ID: CABLE PERCUSSION || Project: J19232 - 8 OAKHILL AVENUE.GPJ || Library: GEA LIBRARY.GLB || Date: 5 November 2019

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
8 Oakhill Avenue, London, NW3 7RE				**BH1**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J19232	09-09-19 11-09-19	8.88	E 525,703.0 N 185,731.0	
Client		Engineer		Sheet
N. Abrams		Price and Myers		2 of 2

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
8.00-8.45	U18						Very stiff to stiff dark grey sandy silty CLAY. Sand is fine. *(continued)* 8.00 - 8.50 m: Slightly fissured	
8.95 9.00	SDS19 D20	21 blows					9.00 m: Slightly fissured	
9.50-9.95	SPT21	2,2/3,3,4,4 N60 = 15	2 2					
10.50	D22					(6.50)	10.50 m: Fissured	
11.00-11.45	U23	28 blows						
11.45	SDS24						11.50 m: Fissured occasionally mottled brown	
12.00	D25							
12.50-12.95	SPT26	2,3/4,5,5,6 N60 = 22					12.50 - 13.00 m: Fissured	
13.50	D27						13.50 m: Fissured	
				-5.12		14.00		
14.00-14.45	U28	32 blows					Stiff friable dark grey fissured silty CLAY.	
14.45	SDS29					(1.00)		
				-6.12		15.00		
15.00	D30							

Boring Progress and Water Observations

Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

Services inspection pit excavated to 1.00 m for 1.5 hrs.
Borehole completed at 15.00 m.

All dimensions in metres Scale 1:50	Method/ Plant Used Cable Percussion	Logged By SZ

Report ID: CABLE PERCUSSION || Project: J19232 - 8 OAKHILL AVENUE.GPJ || Library: GEA LIBRARY.GLB || Date: 5 November 2019

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
8 Oakhill Avenue, London, NW3 7RE				**WS1**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J19232	12-09-19 12-09-19	12.66	E 525,703.0 N 185,731.0	
Client		Engineer		Sheet
N. Abrams		Price and Myers		1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				12.46		0.20	Grass over TOPSOIL. Dark brown gravelly fine to coarse sand. Gravel is fine and medium subangular with occasional roots and roootlets and rare brick fragments.	
0.50	ES1			12.06		(0.40) 0.60	Reddish brown clayey gravelly fine to coarse SAND. Gravel is fine to coarse angular to subangular of flint and bricks. Occasional roots and root hair. (Possible made ground)	
1.00	D2			11.66		(0.40) 1.00	Soft sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded of bricks and flint fragments. (Possible made ground)	
1.50	D3		▼1.1	11.16		(0.50) 1.50	Firm to soft light brown occasionally mottled bluish grey silty CLAY with occasional rootlets.	
2.00-2.50	D4						Soft light brown sandy CLAY. Sand is fine to coarse.	
3.00	D5					(3.50)		
3.50-4.00	D6						3.50 m: Occasionally mottled bluish grey	
4.50-5.00	D7						4.50 m: Stiff to firm	
				7.66		5.00		

Boring Progress and Water Observations					
Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

All dimensions in metres Scale 1:50	Method/ Plant Used Window sampler	Logged By SZ

Report ID: CABLE PERCUSSION || Project: J19232 - 8 OAKHILL AVENUE.GPJ || Library: GEA LIBRARY.GLB || Date: 5 November 2019

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
8 Oakhill Avenue, London, NW3 7RE				**WS2**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J19232	11-09-19 11-09-19	10.09	E 525,703.0 N 185,731.0	
Client	Engineer			Sheet
N. Abrams	Price and Myers			1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				9.84		0.25	TOPSOIL. Dark brown slightly gravely fine to coarse sandwith frequent to abundant roots and rootlets. Gravel is fine to coarse subangular to subrounded of brick fragments. (Possible made ground)	
0.50	ES1			8.99		(0.85) 1.10	Light brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is fine and medium subrounded of flint with occasional roots 0.50 m: Becomed reddish brown	
1.30-1.50	D2			8.69		1.40	Stiff light brown sandy CLAY. Sand is fine to coarse with occasional roots and root hair. (Desiccated soil)	
2.00	D3			7.79		(0.90) 2.30	Stiff light brown silty slightly sandy CLAY. Sand is fine to coarse. (Desiccated soil) 1.80 - 2.00 m: Orange brown clayey fine to coarse sand	
2.50	D4						Firm red to orange brown very sandy CLAY. Sand is fine to coarse.	
3.50-4.00	D5			6.09		(1.70) 4.00		
4.50-5.00	D6			5.09		(1.00) 5.00	Firm reddish brown mottled grey sandy CLAY with frequent black specs. Sand is fine to coarse.	

Boring Progress and Water Observations					
Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

All dimensions in metres Scale 1:50	Method/ Plant Used Window sampler	Logged By SZ

Report ID: CABLE PERCUSSION || Project: J19232 - 8 OAKHILL AVENUE.GPJ || Library: GEA LIBRARY.GLB || Date: 5 November 2019

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
8 Oakhill Avenue, London, NW3 7RE				**WS3**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J19232	12-09-19 12-09-19	9.30	E 525,703.0 N 185,731.0	
Client		Engineer		Sheet
N. Abrams		Price and Myers		1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				9.10		0.20	MADE GROUND. Dark brown gravelly fine to coarse sand with roots and rootlets. Gravel is fine to coarse angular to subangular of brick fragments.	
0.30	ES1							
0.50-1.00	D2					(0.80)	Firm brown sandy CLAY. Sand is fine to coarse.	
			▽	8.30		1.00		
							Firm to soft silty slightly sandy CLAY. Sand is fine to coarse.	
							1.00 - 1.50 m: Occasional roots and rootlets	
1.50-2.00	D3						1.50 - 2.00 m: Mottled grey	
2.00-2.50	D4							
3.00-3.50	D5					(4.00)		
4.00-4.50	D6							
							4.50 - 5.00 m: Firm to stiff mottled grey clay	
				4.30		5.00		

Boring Progress and Water Observations					
Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

All dimensions in metres Scale 1:50	Method/ Plant Used Window sampler	Logged By SZ

Report ID: CABLE PERCUSSION || Project: J19232 - 8 OAKHILL AVENUE.GPJ || Library: GEA LIBRARY.GLB || Date: 5 November 2019

Synergy Boreholes and systems ltd.
Email info@synergyboreholes.co.uk
Tel:01491 828208
www.synergyboreholes.co.uk

Borehole record form

British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL

Environment Agency

Water Resources Act 1991 (as amended by the Water Act 2003)

A Site details

Borehole drilled for GEOTHERMAL HEATING

Location 22 FROGNAL WAY, HAMPSTEAD, LONDON, NW3 6XE

NGR (ten digits) 26272 85559 Please attach site plan

Ground level (if known) 97 metres Above Ordnance Datum

Drilling company SYNERGY BOREHOLES

Date drilling commenced 04-06-2018 (DD/MM/YYYY) Completed -06-2018 (DD/MM/YYYY)

B Construction details

Borehole datum (if not ground level) _____ metres (m). Please tick if this is above ☐ or below ☑ ground level.
(point from which all measurements of depth are taken, for example, flange, edge of chamber)

Borehole drilled diameter

150	mm from	0	to	135 m/depth
150	mm from	0	to	135 m/depth
150	mm from	0	to	135 m/depth
150	mm from	0	to	135 m/depth

Casing material _____ diameter _____ mm from _____ to _____ m/depth
and type (for example, if plain steel, plastic slotted). Please record permanent casing details, not temporary casing.

Casing material _____ diameter _____ mm from _____ to _____ m/depth

Casing material _____ diameter _____ mm from _____ to _____ m/depth

Casing material _____ diameter _____ mm from _____ to _____ m/depth

Grouting details _____

Water struck at 1. 5 m (depth below datum – mbd) 2. 5 m (mbd)

3. 5 m (mbd) 4. 5 m (mbd)

C Test pumping summary (Please supply full details on form WR39)

Test pumping datum _____ m. Please tick if this is above ☐ or below ☐ ground level.
(if different from borehole datum)

Pump suction depth _____ mbd

Water level (start of test) _____ mbd

Water level (end of test) _____ mbd

Type of test (for example, bailer, step, constant rate)

_____

Pumping rate _____ m³/hour ☐ or litres/second ☐. Please tick as appropriate.

for _____ days, _____ hours, _____ mins

Recovery to _____ mbd in _____ days, _____ hours, _____ mins
(from end of pumping)

Date(s) of measurements Pump started _____ (DD/MM/YYYY)

Pump stopped _____ (DD/MM/YYYY)

Please supply chemical analysis if available. If you have included this please tick this box ☐

Synergy boreholes and systems ltd.

WR38: Borehole record form

D Strata log

Geological classification (BGS only)	Description of strata	Thickness m	Depth (to base of strata) m
	MADE GROUND	0	0-5
	LONDON CLAY	0-5	125
	THANET CLAY	125	135
	(continue on separate page if necessary)		
	Other comments (for example, gas encountered, saline water intercepted)		

E Completing this form

How long did it take you to fill in this form? 5 MINS

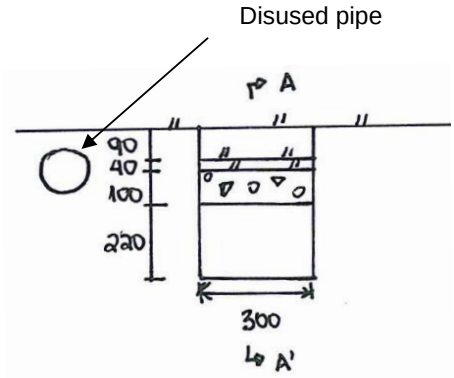
For Official use only

Date received (DD/MM/YYYY)	File	Consent number	BGS reference number
Accession number	Wellmaster number	SOBI number	NGR
LIC NO	Purpose		EA reference number
Copy number	Entered by		

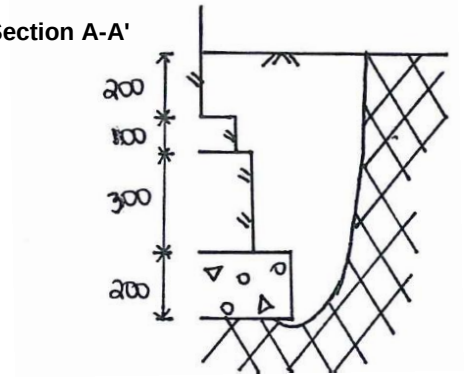
GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** 1
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 1 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Location**
Manually excavated	450 x 300 x 800 mm		As per attached site plan

Plan



Section A-A'



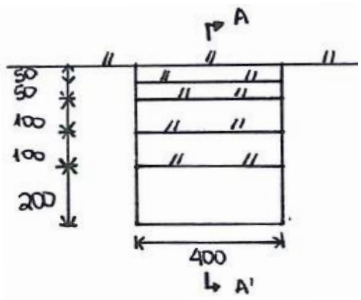
Made ground (dark brown clayey fine to coarse sand with abundant roots and rootlets and brick fragments)

Remarks: All dimensions in millimetres Groundwater was not encountered	Scale: 1:20 Logged by: SZ

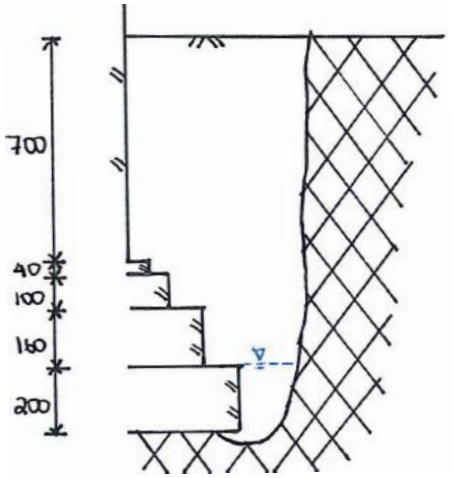
GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** 2
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 2 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	Dimensions	Ground Level (mOD)	Location
Manually excavated	500 x 400 x 1200 mm		As per attached site plan

Plan



Section A-A'



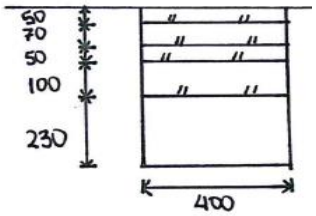
Made ground (brown sandy clay with occasional roots rootlets and brick fragments)

Remarks:	Scale:
All dimensions in millimetres	1:20
Groundwater encountered at 1.00 m	Logged by: SZ

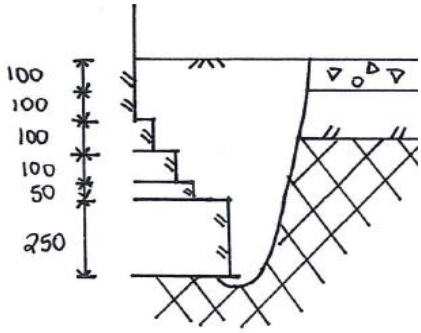
GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** 3
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 3 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Location**
Manually excavated	500 x 400 x 700 mm		As per attached site plan

Plan



Section A-A'



Concrete slab

Bricks

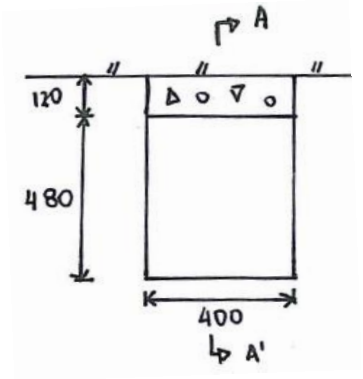
Made ground (soft to firm light orange brown clay with occasional rootlets and brick fragments)

Remarks:	Scale:
All dimensions in millimetres	1:20
Groundwater was not encountered	Logged by: SZ

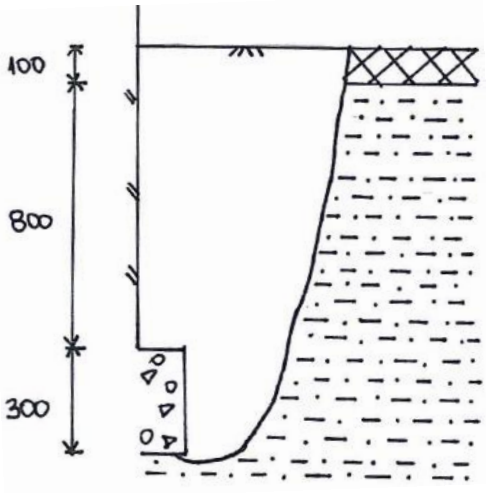
GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** 4
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 4 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Location**
Manually excavated	600 x 400 x 1200 mm		As per attached site plan

Plan



Section A-A'



Made ground (dark brown fine to coarse sand with rootlets)

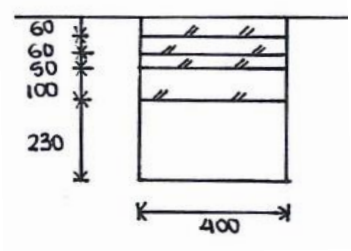
Dark brown clayey gravelly fine to coarse SAND

Remarks: All dimensions in millimetres Groundwater was not encountered	Scale: 1:20 Logged by: SZ

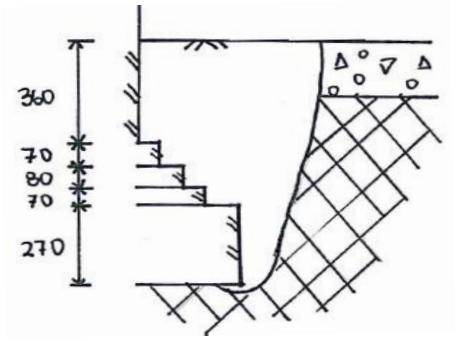
GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** A
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 5 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Location**
Manually excavated	500 x 400 x 850 mm		As per attached site plan

Plan



Section A-A'



Concrete slab

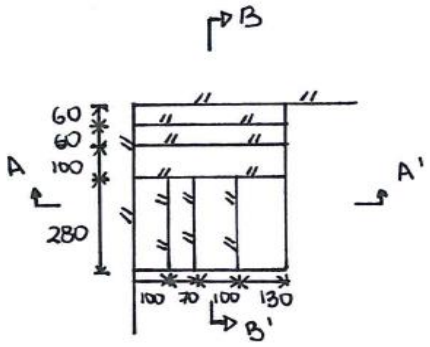
Made ground (brown sandy clayey gravel of concrete and glass fragments)

Remarks: All dimensions in millimetres Groundwater was not encountered	Scale: 1:20
	Logged by: SZ

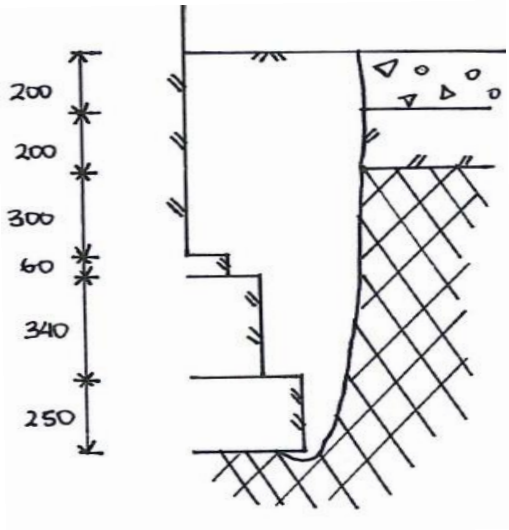
GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** B
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 6 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Location**
Manually excavated	500 x 400 x 1350 mm		As per attached site plan

Plan



Section A-A'



Concrete

Bricks

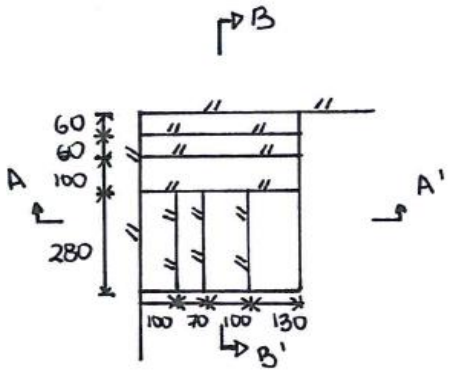
Made ground (reddish brown gravelly clay with concrete and brick fragments

Remarks:	Scale:
All dimensions in millimetres	1:20
Groundwater was not encountered	Logged by: SZ

GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** B
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 7 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Location**
Manually excavated	500 x 400 x 900 mm		As per attached site plan

Plan

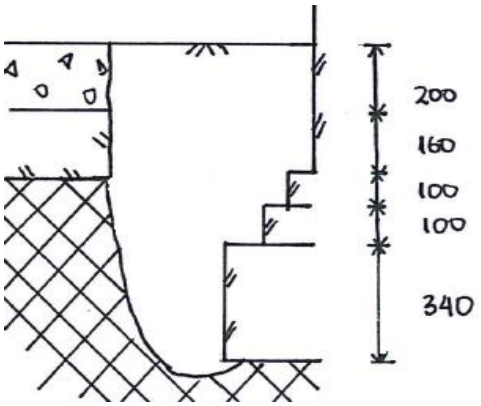


Section B-B'

Concrete

Bricks

Made ground (reddish brown gravelly clay with concrete and brick fragments)



Remarks: All dimensions in millimetres Groundwater was not encountered	Scale: 1:20 Logged by: SZ

GEA	www.gea-ltd.co.uk Herts | 01727 824666 Notts | 01509 674888	**Trial Pit No** B
Site 8 Oakhill Avenue, London, NW3 7RE		**Job Number** J19232
Client N. Abrams		**Sheet** 8 of 8
Engineer Price and Myers		**Date** 11/09/2019

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Location**
Manually excavated			As per attached site plan

Section A-A'

Section B-B'

Remarks:	Scale:
All dimensions in millimetres	1:20
Groundwater was not encountered	Logged by: SZ

SUMMARY OF GEOTECHNICAL TESTING

Sample details					Classification Tests					Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Borehole / Trial Pit	Depth (m)	Sample Ref	Type	Description	WC (%)	LL (%)	PL (%)	PI (%)	<425 µm (%)	Bulk Mg/m³	Dry Mg/m³	Condition	Cell Pressure kPa	Deviator Stress kPa	Shear Stress kPa	pH	2:1 W/S SO4 (g/L)	W/S Mg (mg/L)	
BH1	0.20	1	D	Orangish brown slightly fine sandy silty CLAY with rare fine to medium gravel and rootlets.	16.0	42	19	23	98										
BH1	1.00	2	U	Firm mottled yellowish brown and brown fine sandy silty CLAY	22.8					1.88	1.53	Undisturbed	20	99	49				
BH1	1.45	3	D	Light brown and orangish brown slightly fine sandy silty CLAY.	24.9	43	23	20	100										
BH1	1.70	4	D													5.1	< 0.010		
BH1	2.00	5	D	Light brown and orangish brown slightly fine sandy silty CLAY with rare fine to medium gravel.	19.6	41	22	19	99										
BH1	2.70	6	D	Orangish brown mottled dark brown slightly fine sandy silty CLAY.	29.1	40	23	17	100										
BH1	3.00	7	U	Stiff friable mottled yellowish brown and brown fine sandy silty CLAY	28.2					1.95	1.52	Undisturbed	60	143	71				
BH1	3.45	8	D													5.3	< 0.010		
BH1	3.70	9	D	Mottled orangish brown, reddish brown and light grey slightly fine sandy silty CLAY with rare fine to medium gravel.	27.5	47	21	26	99										
BH1	4.00	10	D													5.6	< 0.010		

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

GEOLABS®

SUMMARY OF GEOTECHNICAL TESTING

Sample details					Classification Tests					Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Borehole / Trial Pit	Depth (m)	Sample Ref	Type	Description	WC (%)	LL (%)	PL (%)	PI (%)	<425 µm (%)	Bulk Mg/m³	Dry Mg/m³	Condition	Cell Pressure kPa	Deviator Stress kPa	Shear Stress kPa	pH	2:1 W/S SO4 (g/L)	W/S Mg (mg/L)	
BH1	4.70	11	D	Mottled orangish brown, reddish brown and light grey slightly fine sandy silty CLAY with rare fine gravel.	31.0	52	21	31	99										
BH1	5.00	12	U	Firm friable mottled light brown and yellowish brown fine sandy silty CLAY	31.0					1.95	1.49	Undisturbed	100	78	39				
BH1	5.45	13	D	Mottled orangish brown and light grey sandy silty CLAY.															Particle Size Distribution
BH1	6.50	15	D													6.3	0.25		
BH1	7.50	17	D	Dark grey fine sandy silty CLAY.															Particle Size Distribution
BH1	8.00	18	U	Firm friable dark grey fine sandy silty CLAY	26.6					1.99	1.57	Undisturbed	160	147	73				
BH1	11.50		U	Stiff friable dark grey fine sandy silty CLAY	25.7					2.03	1.61	Undisturbed	230	76	38				
BH1	14.00	28	U	Stiff friable dark grey fine sandy silty CLAY	23.0					2.02	1.65	Undisturbed	280	190	95				

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

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BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

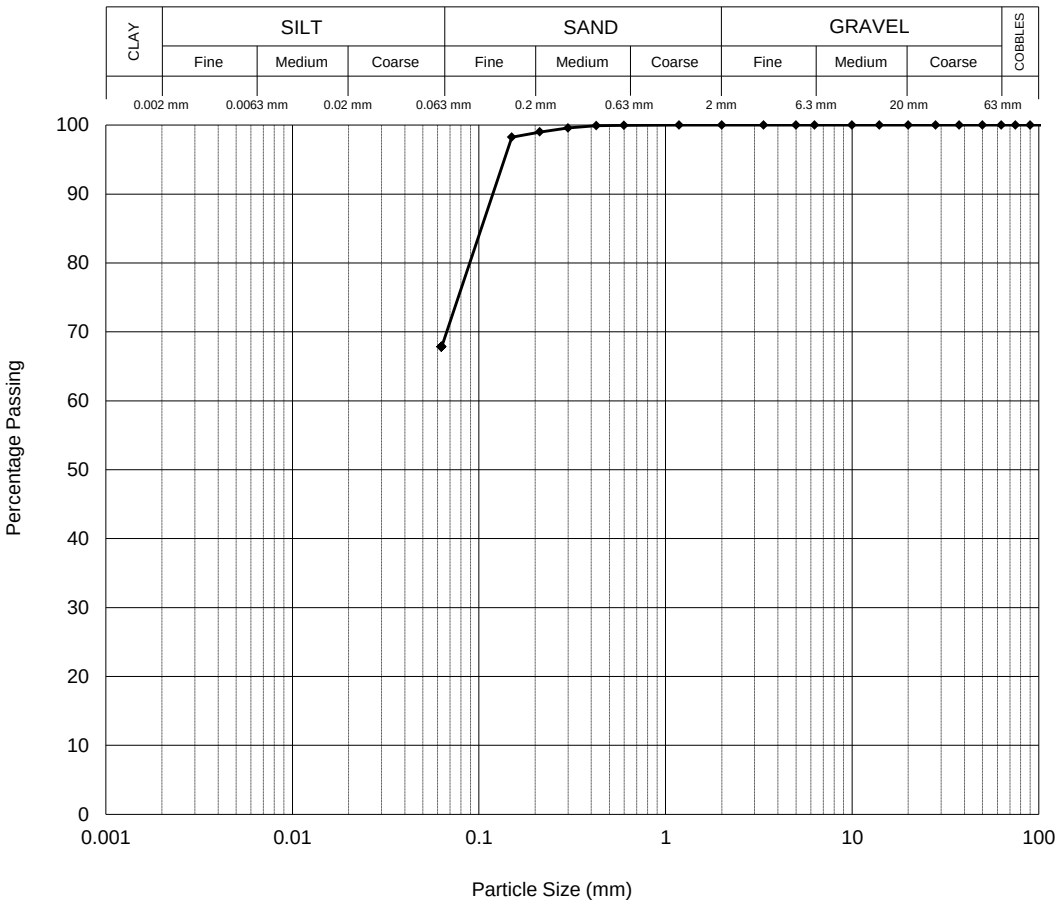
BH / TP No.	BH1
Sample Ref	13
Depth (m)	5.45
Sample Type	D

Description

Mottled orangish brown and light grey sandy silty CLAY.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	100
14.0 mm	100
10.0 mm	100
6.30 mm	100
5.00 mm	100
3.35 mm	100
2.00 mm	100
1.18 mm	100
600 µm	100
425 µm	100
300 µm	100
212 µm	99
150 µm	98
63 µm	68



Particle Proportions	
Cobbles	0
Gravel	0
Sand	32
Silt & Clay	68

Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

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UKAS TESTING 1982

BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

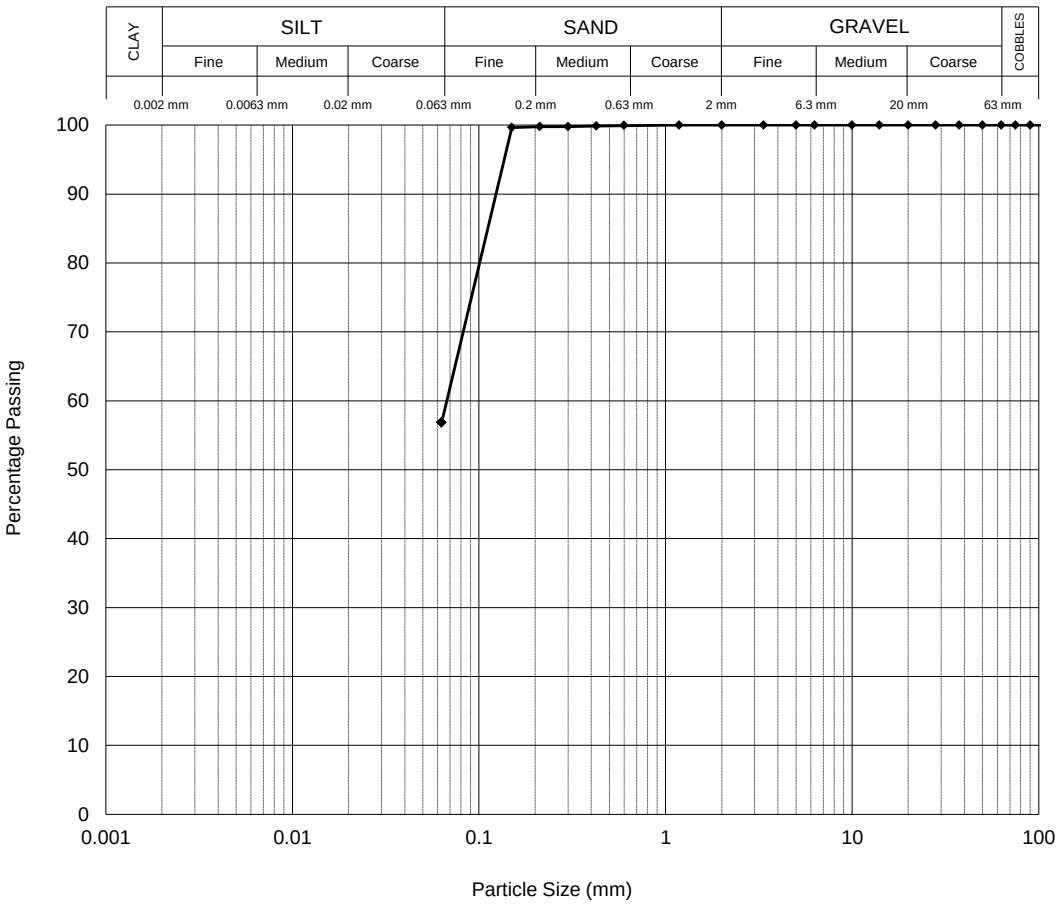
BH / TP No.	BH1
Sample Ref	17
Depth (m)	7.50
Sample Type	D

Description

Dark grey fine sandy silty CLAY.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	100
14.0 mm	100
10.0 mm	100
6.30 mm	100
5.00 mm	100
3.35 mm	100
2.00 mm	100
1.18 mm	100
600 µm	100
425 µm	100
300 µm	100
212 µm	100
150 µm	100
63 µm	57



Particle Proportions	
Cobbles	0
Gravel	0
Sand	43
Silt & Clay	57

Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

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BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

BH/TP No	BH1
Sample Ref	2
Depth (m)	1.00
Sample Type	U

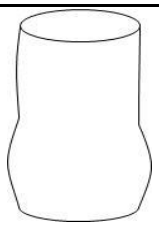
Description:

Firm mottled yellowish brown and brown fine sandy silty CLAY.

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	202.8
Diameter	(mm)	104.6
Moisture content	(%)	22.8
Bulk density	(Mg/m³)	1.88
Dry density	(Mg/m³)	1.53
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	202.4
Membrane correction	(kPa)	0.4
Mean rate of shear	(%/min)	1.0
Cell pressure	(kPa)	20
Strain at failure	(%)	4.9
Maximum deviator stress	(kPa)	99
Shear Stress Cu	(kPa)	49

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	110

Processed by SB
Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

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BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

BH/TP No	BH1
Sample Ref	7
Depth (m)	3.00
Sample Type	U

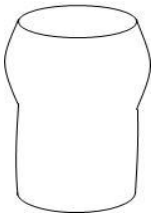
Description:

Stiff friable mottled yellowish brown and brown fine sandy silty CLAY

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	202.2
Diameter	(mm)	104.4
Moisture content	(%)	28.2
Bulk density	(Mg/m³)	1.95
Dry density	(Mg/m³)	1.52
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	202.0
Membrane correction	(kPa)	0.7
Mean rate of shear	(%/min)	1.0
Cell pressure	(kPa)	60
Strain at failure	(%)	10.4
Maximum deviator stress	(kPa)	143
Shear Stress Cu	(kPa)	71

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	100

Processed by SB
Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
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BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

BH/TP No	BH1
Sample Ref	12
Depth (m)	5.00
Sample Type	U

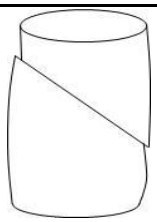
Description:

Firm friable mottled light brown and yellowish brown fine sandy silty CLAY

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	202.4
Diameter	(mm)	104.0
Moisture content	(%)	31.0
Bulk density	(Mg/m³)	1.95
Dry density	(Mg/m³)	1.49
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	202.4
Membrane correction	(kPa)	0.7
Mean rate of shear	(%/min)	1.0
Cell pressure	(kPa)	100
Strain at failure	(%)	10.4
Maximum deviator stress	(kPa)	78
Shear Stress Cu	(kPa)	39

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	130

Processed by SB
Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

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BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

BH/TP No	BH1
Sample Ref	18
Depth (m)	8.00
Sample Type	U

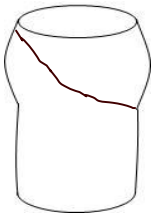
Description:

Firm friable dark grey fine sandy silty CLAY

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	202.5
Diameter	(mm)	104.8
Moisture content	(%)	26.6
Bulk density	(Mg/m³)	1.99
Dry density	(Mg/m³)	1.57
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	202.4
Membrane correction	(kPa)	0.9
Mean rate of shear	(%/min)	1.0
Cell pressure	(kPa)	160
Strain at failure	(%)	14.3
Maximum deviator stress	(kPa)	147
Shear Stress Cu	(kPa)	73

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	50

Processed by SB
Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

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1982

BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

BH/TP No	BH1
Depth (m)	11.50
Sample Type	U

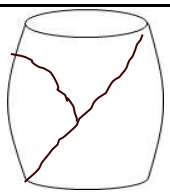
Description:

Stiff friable dark grey fine sandy silty CLAY

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	202.4
Diameter	(mm)	104.9
Moisture content	(%)	25.7
Bulk density	(Mg/m³)	2.03
Dry density	(Mg/m³)	1.61
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	202.0
Membrane correction	(kPa)	1.1
Mean rate of shear	(%/min)	1.0
Cell pressure	(kPa)	230
Strain at failure	(%)	19.8
Maximum deviator stress	(kPa)	76
Shear Stress Cu	(kPa)	38

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	40

Processed by SB
Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
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UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

BH/TP No	BH1
Sample Ref	28
Depth (m)	14.00
Sample Type	U

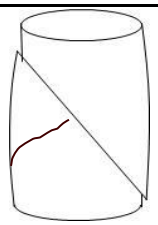
Description:

Stiff friable dark grey fine sandy silty CLAY

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	202.6
Diameter	(mm)	104.6
Moisture content	(%)	23.0
Bulk density	(Mg/m³)	2.02
Dry density	(Mg/m³)	1.65
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	201.5
Membrane correction	(kPa)	0.8
Mean rate of shear	(%/min)	1.0
Cell pressure	(kPa)	280
Strain at failure	(%)	13.8
Maximum deviator stress	(kPa)	190
Shear Stress Cu	(kPa)	95

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	50

Processed by SB
Checked and Approved by

S Burke

S Burke - Senior Technician
30/09/2019

Project Number:

GEO / 29923

Project Name:

8 OAKHILL AVENUE
J19232

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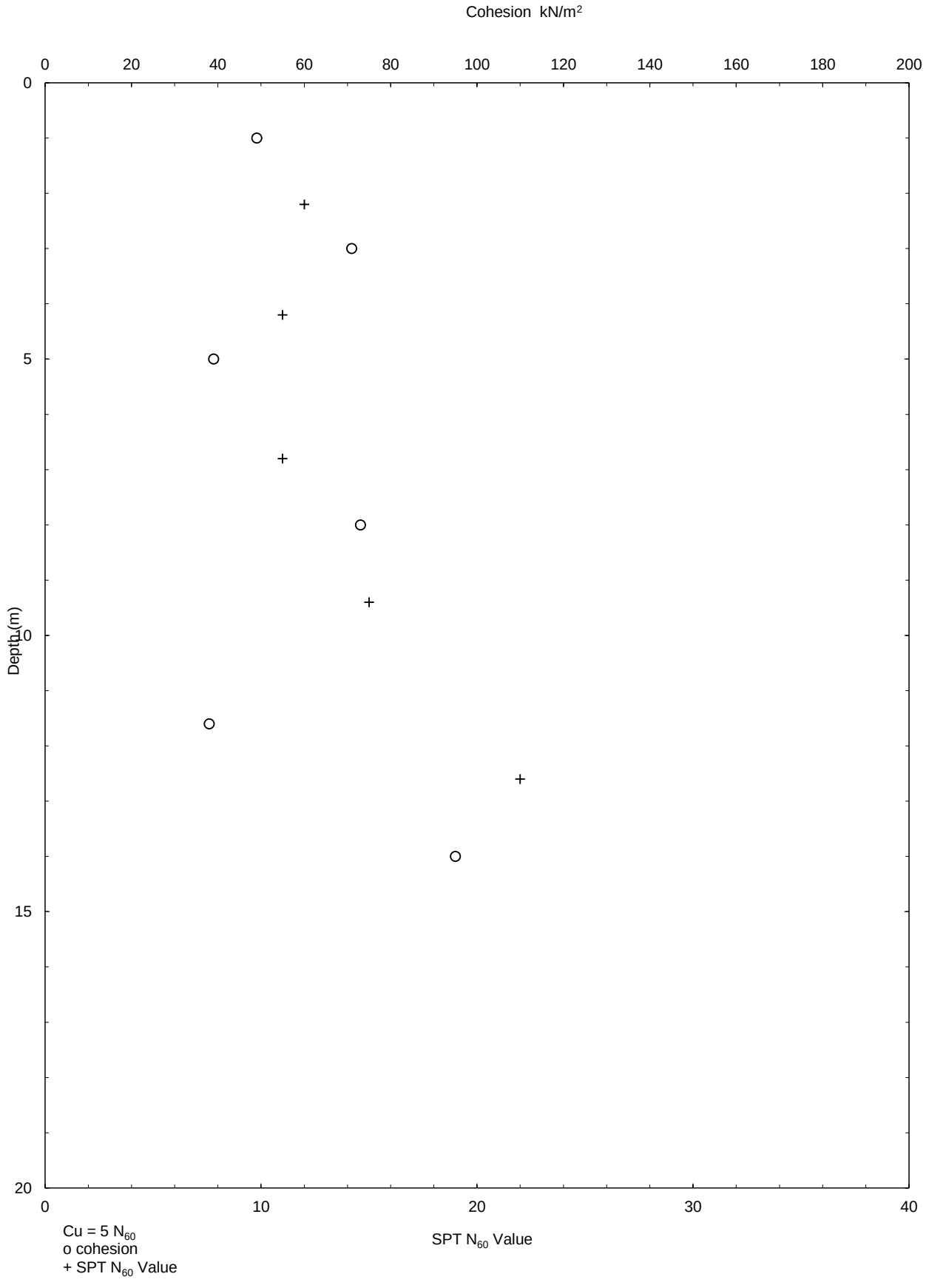
SPT & Cohesion / Depth Graph

Site	8 Oakhill Avenue, London, NW3 7RE
Client	N. Abrams
Engineer	Price and Myers

Job Number J19232

Sheet 1 / 1



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Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 19-59777

Project / Site name:	8 Oakhill Avenue, London, NW3 7RE	**Samples received on:**	16/09/2019
Your job number:	J19232	**Samples instructed on:**	16/09/2019
Your order number:	J19232	**Analysis completed by:**	23/09/2019
Report Issue Number:	1	**Report issued on:**	23/09/2019
Samples Analysed:	4 soil samples		

Signed:

Zina Abdul Razzak
Senior Quality Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 19-59777

Project / Site name: 8 Oakhill Avenue, London, NW3 7RE
Your Order No: J19232

Lab Sample Number				1316769	1316770	1316771	1316772	
Sample Reference				WS3	WS1	WS2	TP3	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.30	0.50	0.50	0.50-0.70	
Date Sampled				12/09/2019	12/09/2019	11/09/2019	11/09/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	-	
Moisture Content	%	N/A	NONE	13	15	12	-	
Total mass of sample received	kg	0.001	NONE	0.44	0.98	0.83	-	
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.2	7.8	4.8	-	
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	-	
Total Sulphate as SO_4	mg/kg	50	MCERTS	1500	1000	1100	-	
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.042	0.076	0.044	-	
Sulphide	mg/kg	1	MCERTS	3.4	1.3	< 1.0	-	
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	16	47	16	-	
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.5	1.1	2.6	-	
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	
Phenanthrene	mg/kg	0.05	MCERTS	0.49	< 0.05	0.43	-	
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	
Fluoranthene	mg/kg	0.05	MCERTS	0.97	0.35	1.0	-	
Pyrene	mg/kg	0.05	MCERTS	0.85	0.31	0.90	-	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.54	0.21	0.53	-	
Chrysene	mg/kg	0.05	MCERTS	0.56	0.22	0.49	-	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.62	0.25	0.60	-	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.31	0.14	0.35	-	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.53	0.21	0.40	-	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.27	< 0.05	0.28	-	
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.36	< 0.05	0.33	-	
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	5.50	1.69	5.34	-	
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	13	25	-	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	-	
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	25	27	-	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	33	36	39	-	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	870	340	150	-	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	-	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	16	12	-	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	3.8	-	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240	110	60	-	
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10	35	-	
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	

Analytical Report Number: 19-59777

Project / Site name: 8 Oakhill Avenue, London, NW3 7RE
Your Order No: J19232

Lab Sample Number				1316769	1316770	1316771	1316772	
Sample Reference				WS3	WS1	WS2	TP3	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.30	0.50	0.50	0.50-0.70	
Date Sampled				12/09/2019	12/09/2019	11/09/2019	11/09/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH (C16 - C21)	mg/kg	1	MCERTS	4.3	< 1.0	10	-	
TPH (C21 - C35)	mg/kg	1	MCERTS	4.2	< 1.0	24	-	

Analytical Report Number : 19-59777

Project / Site name: 8 Oakhill Avenue, London, NW3 7RE

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1316769	WS3	None Supplied	0.30	Brown loam and clay with vegetation and gravel
1316770	WS1	None Supplied	0.50	Brown loam and clay with brick and vegetation.
1316771	WS2	None Supplied	0.50	Brown sandy loam with vegetation and gravel
1316772	TP3	None Supplied	0.50-0.70	-

Analytical Report Number : 19-59777

Project / Site name: 8 Oakhill Avenue, London, NW3 7RE

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests. 2:1 extraction.	L082-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests""	L009-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L038-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

GEA
Widbury Barn
Widbury Hill
Ware
SG12 7QE

Generic Risk-Based Soil Screening Values

Site	8 Oakhill Avenue, London, NW3 7RE	**Job Number** J19232
Client	Mr. N. Abrams	**Sheet** 1/1
Engineer	Price and Myers	

Proposed End Use Residential with plant uptake

Soil Organic Matter content % 2.5

Contaminant	Screening Value mg/kg	Data Source
Metals		
Arsenic	37	C4SL
Cadmium	26	C4SL
Chromium (III)	910	S4UL
Chromium (VI)	21	C4SL
Copper	2,400	S4UL
Lead	200	C4SL
Elemental Mercury	1.2	S4UL
Inorganic Mercury	40	S4UL
Nickel	180	S4UL
Selenium	350	SGV
Zinc	3,700	S4UL
Anions		
Soluble Sulphate	500 mg/l	Structures
Sulphide	50	Structures
Chloride	400	Structures
Others		
Organic Carbon (%)	6	Methanogenic potential
Total Cyanide	140	WRAS
Total Mono Phenols	290	SGV
PAH		
Naphthalene	5.60	S4UL
Acenaphthylene	420	S4UL
Acenaphthene	510	S4UL
Fluorene	400	S4UL
Phenanthrene	220	S4UL
Anthracene	5,400	S4UL
Fluoranthene	560	S4UL
Pyrene	1,200	S4UL
Benzo(a)anthracene	11.0	S4UL
Chrysene	22	S4UL
Benzo(b)fluoranthene	3.3	S4UL
Benzo(k)fluoranthene	93.0	S4UL
Benzo(a)pyrene	4.40	C4SL
Indeno(1 2 3 cd)pyrene	36.0	S4UL
Dibenz(a h)anthracene	0.28	S4UL
Benzo (g h i)perylene	340	S4UL
Total PAH Screen	**62.9**	B(a)P / 0.15

Contaminant	Screening Value mg/kg	Data Source
Hydrocarbons		
Banded TPH (8-10)	128	Calc1
Banded TPH (10-12)	277	Calc1
Banded TPH (12-16)	508	Calc1
Banded TPH (16-21)	831	Calc1
Banded TPH (21-35)	2308	Calc1
Benzene	0.34	C4SL
Toluene	320	SGV
Ethyl Benzene	180	SGV
Xylene	120	SGV
Aliphatic C5-C6	78	S4UL
Aliphatic C6-C8	230	S4UL
Aliphatic C8-C10	65	S4UL
Aliphatic C10-C12	330	S4UL
Aliphatic C12-C16	2400	S4UL
Aliphatic C16-C35	92,000	S4UL
Aromatic C6-C7	See Benzene	S4UL
Aromatic C7-C8	See Toluene	S4UL
Aromatic C8-C10	83	S4UL
Aromatic C10-C12	180	S4UL
Aromatic C12-C16	330	S4UL
Aromatic C16-C21	540	S4UL
Aromatic C21-C35	1500	S4UL
PRO (C_5 –C_{10})	776	Calc2
DRO (C_{12} –C_{28})	95,270	Calc2
Lube Oil (C_{28} –C_{44})	93,500	Calc2
TPH	**750**	Trigger to consider speciated testing
Chlorinated Solvents		
1,1,1 trichloroethane (TCA)	18	S4UL
tetrachloroethane (PCA)	2.8	S4UL
tetrachloroethene (PCE)	0.39	S4UL
trichloroethene (TCE)	0.034	S4UL
1,2-dichloroethane (DCA)	0.011	S4UL
vinyl chloride (Chloroethene)	0.00087	S4UL
tetrachloromethane (Carbon tetra	0.056	S4UL
trichloromethane (Chloroform)	1.7	S4UL

Notes

Concentrations measured below these screening values may be considered to represent 'uncontaminated conditions' which pose a 'LOW' risk to human health. Concentrations measured in excess of these values indicate a potential risk which require further, site specific risk assessment.

C4SL - Defra Category 4 Screening value based on Low Level of Toxicological Risk

SGV - Soil Guideline Value, derived from the CLEA model and published by Environment Agency 2009 - where not superseded by C4SL

S4UL - LQM/CIEH Suitable for use Level (2015) based on 'minimal' level of risk

Calc1 - sum of thresholds for Ali & Aro fractions - assuming a 35% Aro:65% Ali ratio as is commonly encountered in the soil

Calc2 - sum of nearest available carbon range specified including BTEX for PRO fraction

Total PAH based on B(a)P / 0.15 - GEA experience indicates that Benzo(a) pyrene rarely exceeds 15% of the total PAH concentration

GROUNDWATER MONITORING RECORD

JOB NUMBER: J19232

SITE LOCATION: 8 Oakhill Avenue

CLIENT: N. Abrams

ENGINEER: Price and Myers

DATE: 27/09/2019

GEA JOB ENGINEER: SZ

GEA MONITORING ENGINEER:BP

SHEET: 1/2

Borehole Identification	Depth to water (m TBM)	Depth to base (m TBM)	Additional Notes
BH1	3.98	2.78	
WS2	5.89	5.59	
WS3	8.60	3.20	The cap was not installed properly and water from rain was measured

GROUNDWATER MONITORING RECORD

JOB NUMBER: J19232

SITE LOCATION: 8 Oakhill Avenue

CLIENT: N. Abrams

ENGINEER: Price and Myers

DATE: 24/10/2019

GEA JOB ENGINEER: SZ

GEA MONITORING ENGINEER:BP

SHEET: 2/2

Borehole Identification	Depth to water (m TBM)	Depth to base (m TBM)	Additional Notes
BH1	7.98	4.38	
WS2	6.44	5.09	
WS3	8.40	4.30	The cap was not installed properly and water from rain was measured

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
225359419_1_1

Customer Reference:
J19232

National Grid Reference:
525700, 185740

Slice:
A

Site Area (Ha):
0.11

Search Buffer (m):
1000

Site Details:

8, Oakhill Avenue
LONDON
NW3 7RE

Client Details:

Mr S Branch
GEA Ltd
Widbury Barn
Widbury Hill
Ware
Herts
SG12 7QE

GEA

Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes			n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	2
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 1			3	15
Local Authority Pollution Prevention and Control Enforcements	pg 4				1
Nearest Surface Water Feature	pg 4				Yes
Pollution Incidents to Controlled Waters					
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 4				(*4)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 5	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 5	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 6				7

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 7				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 7			1	1
Potentially Infilled Land (Water)	pg 7		1		
Registered Landfill Sites					
Registered Waste Transfer Sites	pg 7				1
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 8	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry					
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry	pg 8		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 10	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 11	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 11	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 11	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 11	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 12		2	21	163
Fuel Station Entries	pg 27				4
Points of Interest - Commercial Services	pg 28			5	27
Points of Interest - Education and Health	pg 30			1	2
Points of Interest - Manufacturing and Production	pg 31			1	3
Points of Interest - Public Infrastructure	pg 31				19
Points of Interest - Recreational and Environmental	pg 33				7
Gas Pipelines					
Underground Electrical Cables	pg 33				6

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (E)	0	1	525696 185738
1	**Discharge Consents** Operator: Thames Water Utilities Ltd Property Type: WTW/WATER COLLECTION/TREATMENT/SUPPLY Location: Kidderpore Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.0165 Permit Version: 1 Effective Date: 15th September 1989 Issued Date: 15th September 1989 Revocation Date: 5th October 2000 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: River Thames **Status:** **Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	305	2	525400 185900
2	**Discharge Consents** Operator: Thames Water Utilities Ltd Property Type: WTW/WATER COLLECTION/TREATMENT/SUPPLY Location: Hampstead Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.0140 Permit Version: 1 Effective Date: 15th September 1989 Issued Date: 15th September 1989 Revocation Date: 5th October 2000 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: River Thames **Status:** **Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	610	2	526200 186100
3	**Discharge Consents** Operator: Thames Water Utilities Ltd Property Type: WTW/WATER COLLECTION/TREATMENT/SUPPLY Location: Shoot Up Hill Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.0234 Permit Version: 1 Effective Date: 15th September 1989 Issued Date: 15th September 1989 Revocation Date: 5th October 2000 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: River Thames **Status:** **Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A12SW (W)	908	2	524800 185500
4	**Local Authority Pollution Prevention and Controls** Name: Cottontail Cleaners Location: 509 Finchley Road, London, Nw3 7bb Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC19 Dated: 5th February 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status:** **Permitted** Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	339	3	525456 185484
4	**Local Authority Pollution Prevention and Controls** Name: The London Dry Cleaning Company Location: 519a Finchley Road, London, Nw3 7bb Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC51 Dated: 1st March 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status:** **Permitted** Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	340	3	525432 185511

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Local Authority Pollution Prevention and Controls** Name: Cottontail Cleaners Location: 509 Finchley Road, London, Nw3 7bb Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC48 Dated: 1st January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A13SW (SW)	340	3	525454 185484
5	**Local Authority Pollution Prevention and Controls** Name: Sparkle Dry Cleaning Location: 329 West End Lane, London, Nw6 1rs Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC34 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	599	3	525385 185205
6	**Local Authority Pollution Prevention and Controls** Name: Texaco Location: 63 Fortune Green, LONDON, NW6 1DR Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 16th September 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorisation revoked** Positional Accuracy: Manually positioned to the address or location	A12SE (W)	609	3	525083 185596
6	**Local Authority Pollution Prevention and Controls** Name: Fortune Green Filling Station (Texaco) Location: 63 Fortune Green Road, LONDON, NW6 1DR Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 24th June 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A12SE (W)	609	3	525083 185596
7	**Local Authority Pollution Prevention and Controls** Name: Perkins Dry Cleaners Location: 40 Heath Street, London, Nw3 6te Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC9 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A14SE (E)	651	3	526374 185724
8	**Local Authority Pollution Prevention and Controls** Name: EssoTower Service Station Location: 617 Finchley Road, LONDON, NW3 7BS Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 1st December 1999 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	671	3	525052 186022
8	**Local Authority Pollution Prevention and Controls** Name: Tower Service StationRoc Uk Ltd Location: 617 Finchley Road, Fortune Green, London, NW3 7BS Authority: London Borough of Barnet, Environmental Health Department Permit Reference: PPC53 Dated: 1st January 1999 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12NE (NW)	672	4	525052 186022

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Local Authority Pollution Prevention and Controls** Name: Shamrock Express Cleaners Location: 210 West End Lane, London, Nw6 1uu Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC33 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A8SW (S)	688	3	525517 185048
10	**Local Authority Pollution Prevention and Controls** Name: Cotton Club Dry Cleaners Location: 57 Mill Lane, London, Nw6 1nb Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC19 Dated: 5th February 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	759	3	525119 185231
11	**Local Authority Pollution Prevention and Controls** Name: Starcraft Location: 394 Finchley Road, Hampstead, London, Nw2 2hr Authority: London Borough of Barnet, Environmental Health Department Permit Reference: PPCDC031 Dated: 2nd August 2006 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	763	4	525083 186245
12	**Local Authority Pollution Prevention and Controls** Name: Speedy Motors Location: Unit 1 6 Devonshire Place, London, Nw2 2hx Authority: London Borough of Barnet, Environmental Health Department Permit Reference: PPC61 Dated: 12th February 2010 Process Type: Local Authority Pollution Prevention and Control Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	835	4	525081 186351
13	**Local Authority Pollution Prevention and Controls** Name: Madame George Dry Cleaners Location: 227 West End Lane, London, Nw6 1xj Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC15 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A8SW (S)	853	3	525499 184882
14	**Local Authority Pollution Prevention and Controls** Name: Crystalline Dry Cleaners Location: 450 Finchley Road, London, Nw2 2hy Authority: London Borough of Barnet, Environmental Health Department Permit Reference: PPCDC036 Dated: 24th August 2006 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A17NE (NW)	888	4	525072 186416
15	**Local Authority Pollution Prevention and Controls** Name: Janet'S Hand Laundry Ltd Location: 281a Finchley Road, London, Nw3 6nd Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC14 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	908	3	526167 184924

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**Local Authority Pollution Prevention and Controls** Name: Hampstead Express Dry Cleaning Location: 279a Finchley Road, London, Nw3 6lt Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC6 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	933	3	526178 184902
16	**Local Authority Pollution Prevention and Controls** Name: Castle Service Station Location: 713 Finchley Road, LONDON, NW11 8DH Authority: London Borough of Barnet, Environmental Health Department Permit Reference: PPC31 Dated: 13th January 1999 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station **Status: Authorisation revoked** Positional Accuracy: Manually positioned to the address or location	A17NE (NW)	952	4	525037 186471
17	**Local Authority Pollution Prevention and Control Enforcements** Location: 394 Finchley Road, Hampstead, London, Nw2 2hr Type: Air Pollution Control Enforcement Notice Reference: PPCDC031 Date Issued: 7th November 2008 Enforcement Date: Not Supplied Details: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	763	4	525083 186245
	Nearest Surface Water Feature	A19SW (NE)	772	-	526249 186289
	Water Abstractions Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5SW (SE)	1783	2	526750 184261
	Water Abstractions Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: General Washing/Process Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5SW (SE)	1783	2	526750 184261

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Lake And Pond Throughflow Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5SW (SE)	1783	2	526750 184261
	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0219 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5SW (SE)	1797	2	526800 184280
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Mixed Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (E)	0	5	525696 185738
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NW (E)	0	5	525696 185738
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 242.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	788	6	525873 186531
19	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	792	6	525924 186521
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	793	6	525924 186522
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	798	6	525934 186524
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	798	6	525934 186524
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 168.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	851	6	525710 186619
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 181.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	941	6	525579 186704

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	**Historical Landfill Sites** Licence Holder: Not Supplied Location: London NW6 Name: Canfield Place Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD12043 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Not Supplied EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: DON009	A8SE (S)	954	2	526032 184810
	Local Authority Landfill Coverage Name: London Borough of Camden - Has no landfill data to supply		0	7	525696 185738
	Local Authority Landfill Coverage Name: London Borough of Barnet - Has supplied landfill data		569	8	525473 186298
26	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1996	A12NE (NW)	471	10	525283 186027
27	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1996	A9NE (SE)	988	10	526616 185296
28	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1896	A13SE (S)	98	10	525731 185613
29	**Registered Waste Transfer Sites** Licence Holder: L.B. of Camden Licence Reference: DL137 Site Location: 152 West End Lane, CAMDEN, London, NW6 Operator Location: Old Town Hall, Haverstock Hill, CAMDEN, London, NW3 4QP Authority: Environment Agency - Thames Region, North East Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st August 1983 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Asbestos Elect.Capacitors Cont'G Pcb Fluid Prohibited Waste: Biodegradable/Putrescible Waste Clinical Wastes Notifiable Wastes Special Wastes	A8SW (S)	936	2	525530 184790

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Thames Group	A13NW (E)	0	1	525696 185738
	BGS Estimated Soil Chemistry No data available				
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525676, 185669 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 13.90 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 116.40 mg/kg Lead Measured Concentration: 247.30 mg/kg Nickel Measured Concentration: 22.60 mg/kg	A13SW (S)	52	1	525676 185669
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525369, 185647 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 22.30 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 96.20 mg/kg Lead Measured Concentration: 568.80 mg/kg Nickel Measured Concentration: 31.90 mg/kg	A13SW (W)	321	1	525369 185647
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525663, 186188 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 15.70 mg/kg Cadmium Measured Concentration: 0.70 mg/kg Chromium Measured Concentration: 156.80 mg/kg Lead Measured Concentration: 1130.60 mg/kg Nickel Measured Concentration: 23.00 mg/kg	A18SW (N)	421	1	525663 186188
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525772, 185213 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 18.20 mg/kg Cadmium Measured Concentration: 0.90 mg/kg Chromium Measured Concentration: 73.50 mg/kg Lead Measured Concentration: 471.40 mg/kg Nickel Measured Concentration: 25.90 mg/kg	A8NE (S)	499	1	525772 185213

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526223, 185630 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 19.70 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 127.10 mg/kg Lead Measured Concentration: 514.80 mg/kg Nickel Measured Concentration: 23.20 mg/kg	A14SW (E)	508	1	526223 185630
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525393, 186257 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 11.90 mg/kg Cadmium Measured Concentration: 1.50 mg/kg Chromium Measured Concentration: 51.30 mg/kg Lead Measured Concentration: 269.20 mg/kg Nickel Measured Concentration: 21.40 mg/kg	A18SW (NW)	567	1	525393 186257
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526278, 185352 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 25.30 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 122.20 mg/kg Lead Measured Concentration: 273.70 mg/kg Nickel Measured Concentration: 19.50 mg/kg	A9NW (SE)	666	1	526278 185352
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525300, 185159 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 15.10 mg/kg Cadmium Measured Concentration: 0.70 mg/kg Chromium Measured Concentration: 66.80 mg/kg Lead Measured Concentration: 215.90 mg/kg Nickel Measured Concentration: 26.80 mg/kg	A7NE (SW)	685	1	525300 185159
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526219, 186357 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 15.20 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 91.10 mg/kg Lead Measured Concentration: 269.20 mg/kg Nickel Measured Concentration: 15.80 mg/kg	A19SW (NE)	800	1	526219 186357

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 524773, 185748 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 26.70 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 104.00 mg/kg Lead Measured Concentration: 168.10 mg/kg Nickel Measured Concentration: 29.20 mg/kg	A12NW (W)	897	1	524773 185748
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525880, 186665 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 8.50 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 98.60 mg/kg Lead Measured Concentration: 99.90 mg/kg Nickel Measured Concentration: 7.00 mg/kg	A18NE (N)	920	1	525880 186665
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 525401, 184770 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 22.90 mg/kg Cadmium Measured Concentration: 0.90 mg/kg Chromium Measured Concentration: 96.20 mg/kg Lead Measured Concentration: 517.20 mg/kg Nickel Measured Concentration: 35.50 mg/kg	A8SW (S)	988	1	525401 184770
	BGS Urban Soil Chemistry Averages Source: British Geological Survey, National Geoscience Information Service Sample Area: London Count Id: 7209 Arsenic Minimum Concentration: 1.00 mg/kg Arsenic Average Concentration: 17.00 mg/kg Arsenic Maximum Concentration: 161.00 mg/kg Cadmium Minimum Concentration: 0.10 mg/kg Cadmium Average Concentration: 0.90 mg/kg Cadmium Maximum Concentration: 165.20 mg/kg Chromium Minimum Concentration: 13.00 mg/kg Chromium Average Concentration: 79.00 mg/kg Chromium Maximum Concentration: 2094.00 mg/kg Lead Minimum Concentration: 11.00 mg/kg Lead Average Concentration: 280.00 mg/kg Lead Maximum Concentration: 10000.00 mg/kg Nickel Minimum Concentration: 2.00 mg/kg Nickel Average Concentration: 28.00 mg/kg Nickel Maximum Concentration: 506.00 mg/kg	A13NW (E)	0	1	525696 185738

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	197	1	525474 185780
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	134	1	525818 185818
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	134	1	525818 185818
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (E)	0	1	525696 185738

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	**Contemporary Trade Directory Entries** Name: All Rubbish Cleared Location: Redington Rd, London, NW3 7QX Classification: Rubbish Clearance **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13SE (E)	197	-	525919 185694
31	**Contemporary Trade Directory Entries** Name: Plumbright Services Location: 47, Studholme Court, Finchley Road, London, NW3 7AE Classification: Boilers - Servicing, Replacements & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	242	-	525484 185603
32	**Contemporary Trade Directory Entries** Name: Florian Leonhard Fine Violins Location: 3, Frognal Lane, London, NW3 7DY Classification: Musical Instrument - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (S)	305	-	525716 185404
33	**Contemporary Trade Directory Entries** Name: Cleaners In Hampstead Location: 517, Finchley Road, London, NW3 7BB Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	336	-	525443 185504
33	**Contemporary Trade Directory Entries** Name: Cottontail Cleaners Ltd Location: 509, Finchley Road, London, NW3 7BB Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	340	-	525454 185484
33	**Contemporary Trade Directory Entries** Name: The London Dry Cleaning Company Location: 519a, Finchley Road, London, NW3 7BB Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	342	-	525431 185508
33	**Contemporary Trade Directory Entries** Name: London Dry Cleaning Location: 519a, Finchley Road, London, NW3 7BB Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	343	-	525431 185508
34	**Contemporary Trade Directory Entries** Name: Classic Cleaners Location: 475, Finchley Road, London, NW3 6HS Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	367	-	525623 185351
34	**Contemporary Trade Directory Entries** Name: Five Star Location: 469, Finchley Road, London, NW3 6HS Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	375	-	525635 185340
34	**Contemporary Trade Directory Entries** Name: Jav'S 5 Star Dry Cleaners Location: 469, Finchley Road, London, NW3 6HS Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	375	-	525635 185340
34	**Contemporary Trade Directory Entries** Name: Nineteen (Uk) Ltd Location: 369, West End Lane, London, NW6 1LP Classification: Telecommunications Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	389	-	525627 185329
35	**Contemporary Trade Directory Entries** Name: Cleaning Services Hampstead Location: 529, Finchley Road, London, NW3 7BG Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	394	-	525302 185620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
36	**Contemporary Trade Directory Entries** Name: Global Medical Trading Ltd Location: A, 338, West End Lane, London, NW6 1LN Classification: Chemicals - Distributors & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	399	-	525661 185312
36	**Contemporary Trade Directory Entries** Name: Mfk Ltd Location: 461, Finchley Road, London, NW3 6HN Classification: Electronic Equipment - Manufacturers & Assemblers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	400	-	525678 185310
36	**Contemporary Trade Directory Entries** Name: Look New Drycleaners Location: 334, West End Lane, London, NW6 1LN Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (S)	403	-	525653 185309
36	**Contemporary Trade Directory Entries** Name: Carmel Garage Location: 322, West End Lane, London, NW6 1LN Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (S)	417	-	525630 185299
37	**Contemporary Trade Directory Entries** Name: Maximus Property Services Ltd Location: 459, Finchley Road, LONDON, NW3 6HN Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	403	-	525683 185306
37	**Contemporary Trade Directory Entries** Name: Sara Bespoke Curtains Ltd Location: 459, Finchley Road, London, NW3 6HN Classification: Blinds, Awnings & Canopies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	403	-	525683 185306
38	**Contemporary Trade Directory Entries** Name: Grand Products Ltd Location: A, 20, Hollycroft Avenue, London, NW3 7QL Classification: Furniture Manufacturers - Home & Office **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	450	-	525381 186106
39	**Contemporary Trade Directory Entries** Name: Mysparks Ltd Location: 122, Frognal, London, NW3 6XU Classification: Electrical Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (E)	451	-	526150 185865
40	**Contemporary Trade Directory Entries** Name: Specialist Building Products Location: 571, Finchley Road, London, NW3 7BN Classification: Damp & Dry Rot Control **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (W)	498	-	525173 185793
40	**Contemporary Trade Directory Entries** Name: 24 Hour Euro Windscreen Ltd Location: 571, Finchley Road, London, NW3 7BN Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12NE (W)	498	-	525173 185793
40	**Contemporary Trade Directory Entries** Name: Buzy Cleaning Location: 571, Finchley Road, London, NW3 7BN Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (W)	498	-	525173 185793

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
41	**Contemporary Trade Directory Entries** Name: Plastic Sandwich Location: 1st Floor Offices, Hampstead Cemetery, 69, Fortune Green Road, London, NW6 1DR Classification: Bookbinding & Equipment **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	555	-	525119 185695
41	**Contemporary Trade Directory Entries** Name: Texaco Location: 63-65, Fortune Green Road, London, NW6 1DR Classification: Petrol Filling Stations - 24 Hour **Status:** **Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A12SE (W)	562	-	525119 185648
41	**Contemporary Trade Directory Entries** Name: Star Service Stations Location: 63-65, Fortune Green Road, London, NW6 1DR Classification: Petrol Filling Stations **Status:** **Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A12SE (W)	562	-	525119 185648
42	**Contemporary Trade Directory Entries** Name: Green & White Ltd Location: 112, Fortune Green Road, LONDON, NW6 1DH Classification: Vacuum Cleaners, Industrial & Commercial - Repairs & Servicing **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	557	-	525137 185599
42	**Contemporary Trade Directory Entries** Name: Hampstead Dry Cleaners Location: 57, Fortune Green Road, London, NW6 1DR Classification: Dry Cleaners **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	587	-	525105 185596
43	**Contemporary Trade Directory Entries** Name: Ravtex Uk Ltd Location: 95 Platts Lane, London, NW3 7NH Classification: Packaging Materials Manufacturers & Suppliers **Status:** **Active** Positional Accuracy: Manually positioned to the address or location	A18SW (N)	591	-	525464 186318
44	**Contemporary Trade Directory Entries** Name: Wallace Paint Removal Location: Unit 6, London, NW6 1LG Classification: Paint & Varnish Stripping **Status:** **Inactive** Positional Accuracy: Manually positioned within the geographical locality	A8NW (S)	597	-	525492 185152
45	**Contemporary Trade Directory Entries** Name: Sparkle Location: 329, West End Lane, London, NW6 1RS Classification: Dry Cleaners **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	600	-	525383 185205
45	**Contemporary Trade Directory Entries** Name: Woodstock Motors Location: West Heath Yard, 174, Mill Lane, London, NW6 1TB Classification: Breakdown and Recovery **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	615	-	525358 185204
45	**Contemporary Trade Directory Entries** Name: W Kenton Ltd Location: West Heath Yard, 174, Mill Lane, London, NW6 1TB Classification: Printers **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	615	-	525358 185204
45	**Contemporary Trade Directory Entries** Name: Car Express Location: West Heath Yard, 174, Mill Lane, London, NW6 1TB Classification: Garage Services **Status:** **Inactive** Positional Accuracy: Manually positioned to the address or location	A7NE (SW)	615	-	525358 185204

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
46	**Contemporary Trade Directory Entries** Name: Toni'S Paint Removal Location: 138, Cholmley Gardens, London, NW6 1AB Classification: Paint & Varnish Stripping **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	602	-	525321 185249
47	**Contemporary Trade Directory Entries** Name: Rose Dry Cleaners Location: 68, Fortune Green Road, London, NW6 1DS Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (SW)	606	-	525136 185472
47	**Contemporary Trade Directory Entries** Name: Hampstead Dry Cleaners Location: 68, Fortune Green Road, London, NW6 1DS Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (SW)	606	-	525136 185472
47	**Contemporary Trade Directory Entries** Name: Auto Stop Hampstead Tyres Location: 31-33, Fortune Green Road, London, NW6 1DU Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (SW)	631	-	525124 185442
48	**Contemporary Trade Directory Entries** Name: Perkins Dry Cleaners Location: 6, Holly Bush Vale, London, NW3 6TX Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (E)	621	-	526343 185767
48	**Contemporary Trade Directory Entries** Name: Perkins Dry Cleaners Location: 6, Holly Bush Vale, London, NW3 6TX Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	622	-	526343 185767
49	**Contemporary Trade Directory Entries** Name: The Wash House Location: 228, West End Lane, London, NW6 1UR Classification: Laundries & Launderettes **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	637	-	525510 185104
50	**Contemporary Trade Directory Entries** Name: Mercedes Benz Location: 341, Finchley Road, London, NW3 6ET Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	645	-	525978 185122
50	**Contemporary Trade Directory Entries** Name: K C Gray Ltd Location: 341-347, Finchley Road, London, NW3 6ET Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	645	-	525978 185122
50	**Contemporary Trade Directory Entries** Name: Alan Day Location: Finchley Rd, London, NW3 6LT Classification: Commercial Vehicle Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NE (SE)	645	-	525978 185122
50	**Contemporary Trade Directory Entries** Name: Pot Co The Location: 56-58, Lymington Road, London, NW6 1JB Classification: Pottery Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	683	-	525986 185084
51	**Contemporary Trade Directory Entries** Name: Jeeves Of Belgravia Location: 11, Heath Street, London, NW3 6TP Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SW (E)	648	-	526365 185625

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	**Contemporary Trade Directory Entries** Name: Jeeves Location: 11, Heath Street, London, NW3 6TP Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SW (E)	648	-	526365 185625
51	**Contemporary Trade Directory Entries** Name: Hampstead Autos Location: 28, Perrins Walk, London, NW3 6TH Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	652	-	526365 185603
51	**Contemporary Trade Directory Entries** Name: Rubbish Collection Location: Heath St, London, NW3 6TP Classification: Waste Disposal Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14SE (E)	653	-	526372 185640
51	**Contemporary Trade Directory Entries** Name: Office Cleaning Services Location: 3, Heath Street, London, NW3 6TP Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	659	-	526373 185608
52	**Contemporary Trade Directory Entries** Name: Perkins Group Location: 40, Heath Street, London, NW3 6TE Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	650	-	526374 185724
52	**Contemporary Trade Directory Entries** Name: American Dry Cleaning Location: 47, Hampstead High Street, London, NW3 1QG Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	677	-	526400 185759
53	**Contemporary Trade Directory Entries** Name: Esso Location: 617, Finchley Road, London, NW3 7BS Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	660	-	525064 186019
53	**Contemporary Trade Directory Entries** Name: Esso Service Station Location: 617, Finchley Road, London, NW3 7BS Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	671	-	525052 186022
53	**Contemporary Trade Directory Entries** Name: Tower Service Station Location: 617, Finchley Road, London, NW3 7BS Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	671	-	525052 186022
54	**Contemporary Trade Directory Entries** Name: Andrews Location: 22, Heath Street, London, NW3 6TE Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	660	-	526381 185666
54	**Contemporary Trade Directory Entries** Name: Destination Skin Location: 12, Heath Street, London, NW3 6TE Classification: Electrolysis **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	676	-	526396 185655
55	**Contemporary Trade Directory Entries** Name: Vape Emporium Location: 87, Heath Street, London, NW3 6UG Classification: Tobacco Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	662	-	526367 185876

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	**Contemporary Trade Directory Entries** Name: Mark 2 Services Location: Inglewood Garage, Inglewood Road, London, NW6 1QY Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	669	-	525374 185130
57	**Contemporary Trade Directory Entries** Name: Scrap Yard In Hampstead Htt Location: Hampstead Station, Hampstead High Street, London, NW3 1QG Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	672	-	526393 185780
57	**Contemporary Trade Directory Entries** Name: Hampstead Cleaners Location: 5, Flask Walk, London, NW3 1HJ Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	707	-	526429 185760
57	**Contemporary Trade Directory Entries** Name: Bubbles & Light Ltd Location: 9a, Flask Walk, London, NW3 1HJ Classification: Candle Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	714	-	526436 185766
58	**Contemporary Trade Directory Entries** Name: Hampstead Hardware Ltd Location: 54, Heath Street, London, NW3 1DL Classification: Hardware **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	672	-	526391 185793
58	**Contemporary Trade Directory Entries** Name: Soul Revolver Location: 9, Back Lane, London, NW3 1HL Classification: Leather Garments & Products **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	710	-	526425 185827
59	**Contemporary Trade Directory Entries** Name: Shamrock Location: 210, West End Lane, London, NW6 1UU Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	688	-	525518 185048
60	**Contemporary Trade Directory Entries** Name: Crabtree & Evelyn Location: 65, Hampstead High Street, London, NW3 1QP Classification: Toiletries **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	699	-	526422 185704
61	**Contemporary Trade Directory Entries** Name: Auto Air & Hi-Fi Services Location: 331-335, Finchley Road, London, NW3 6EP Classification: Air Conditioning Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	716	-	526043 185075
61	**Contemporary Trade Directory Entries** Name: Autohaus Location: 331-335, Finchley Road, London, NW3 6EP Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	716	-	526043 185075
61	**Contemporary Trade Directory Entries** Name: Supershine Ltd Location: 329, Finchley Road, London, NW3 6EP Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	717	-	526038 185072
62	**Contemporary Trade Directory Entries** Name: Xyz Location: 10, Flask Walk, London, NW3 1HE Classification: Ceramic Manufacturers, Supplies & Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14NE (E)	722	-	526445 185756

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
62	**Contemporary Trade Directory Entries** Name: Hillsdown Holdings Ltd Location: 32, Hampstead High Street, London, NW3 1QD Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	751	-	526475 185717
63	**Contemporary Trade Directory Entries** Name: One Stop Repairs Location: 3, Pattison Road, London, NW2 2HL Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	730	-	525118 186235
63	**Contemporary Trade Directory Entries** Name: V & V Chauffeur Cars Location: Flat 2, 384, Finchley Road, London, NW2 2HP Classification: Car Engine Tuning & Diagnostic Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	731	-	525089 186202
63	**Contemporary Trade Directory Entries** Name: Saffi Dry Cleaners Location: 386, Finchley Road, London, NW2 2HP Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	733	-	525092 186209
63	**Contemporary Trade Directory Entries** Name: Lesley Laundry Dry Cleaning Location: 386, Finchley Road, London, NW2 2HP Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	733	-	525092 186209
63	**Contemporary Trade Directory Entries** Name: Hampstead Auto Centre Ltd Location: A, 1, Pattison Road, London, NW2 2HL Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	736	-	525111 186236
63	**Contemporary Trade Directory Entries** Name: Twinspark Hampstead Ltd Location: A, 1, Pattison Road, London, NW2 2HL Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	736	-	525111 186236
63	**Contemporary Trade Directory Entries** Name: Twinspark Hampstead Ltd Location: 1, Pattison Road, London, NW2 2HL Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	736	-	525111 186236
63	**Contemporary Trade Directory Entries** Name: Ultimate Sonics Location: 392, Finchley Road, London, NW2 2HR Classification: Hi-Fi Equipment Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	758	-	525086 186241
63	**Contemporary Trade Directory Entries** Name: Starcraft Dry Cleaners Location: 394, Finchley Road, London, NW2 2HR Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	761	-	525085 186245
63	**Contemporary Trade Directory Entries** Name: Raging Bull Meats Location: 400a, Finchley Road, London, NW2 2HR Classification: Meat Product Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	776	-	525082 186264
64	**Contemporary Trade Directory Entries** Name: Swiss Cottage Cleaners Location: 202, West End Lane, London, NW6 1SG Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	733	-	525513 185002

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
64	**Contemporary Trade Directory Entries** Name: Capital Appliances Location: 198, West End Lane, London, NW6 1SG Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	742	-	525513 184992
64	**Contemporary Trade Directory Entries** Name: Printco Ltd Location: 251, West End Lane, London, NW6 1XN Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	753	-	525476 184992
65	**Contemporary Trade Directory Entries** Name: Crest Leather Location: Meridian House, 202-204, Finchley Road, London, NW3 6BX Classification: Leather Garments & Products **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	756	-	526129 185080
65	**Contemporary Trade Directory Entries** Name: Crown Hides Location: Meridian House, 202-204, Finchley Road, London, NW3 6BX Classification: Leather Merchants & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	756	-	526129 185080
65	**Contemporary Trade Directory Entries** Name: Fenton Pharmaceuticals Location: Unit 4, Hampstead Gate, 1a, Frognal, London, NW3 6AL Classification: Chemists' & Pharmacists' Suppliers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	775	-	526140 185064
65	**Contemporary Trade Directory Entries** Name: Diamond Laundrette Location: 190, Finchley Road, London, NW3 6BX Classification: Laundries & Launderettes **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	799	-	526143 185037
65	**Contemporary Trade Directory Entries** Name: T & T Cleaning Services Location: 190, Finchley Road, London, NW3 6BX Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	799	-	526143 185037
65	**Contemporary Trade Directory Entries** Name: Clean Line Location: 307c Finchley Rd, London, NW3 6EH Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A9SW (SE)	803	-	526124 185020
65	**Contemporary Trade Directory Entries** Name: Automotive Couture Ltd Location: 186, Finchley Road, London, NW3 6BX Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	809	-	526151 185030
65	**Contemporary Trade Directory Entries** Name: Automotive Couture Gb Ltd Location: 186, Finchley Road, London, NW3 6BX Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	809	-	526151 185030
66	**Contemporary Trade Directory Entries** Name: Spotless Cleaning Location: 35, Flask Walk, London, NW3 1HH Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	760	-	526476 185825
66	**Contemporary Trade Directory Entries** Name: Hampstead Cleaners Location: 35, Flask Walk, London, NW3 1HH Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	760	-	526476 185825

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
67	**Contemporary Trade Directory Entries** Name: Cotton Club Location: 57, Mill Lane, London, NW6 1NB Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	761	-	525119 185229
68	**Contemporary Trade Directory Entries** Name: Hampstead Cleaning Services Location: Flat 15, Durrisdeer House, Lyndale, London, NW2 2PA Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	775	-	524930 185988
69	**Contemporary Trade Directory Entries** Name: Masland Carpets Location: 1, Lymington Road, London, NW6 1HX Classification: Carpets & Rugs - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	777	-	525538 184950
70	**Contemporary Trade Directory Entries** Name: Ridge Garage Ltd Location: Prospect Road, London, NW2 2JT Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	791	-	525038 186234
70	**Contemporary Trade Directory Entries** Name: Rigde Garage Location: Prospect Road, London, NW2 2JT Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	791	-	525038 186234
70	**Contemporary Trade Directory Entries** Name: I C S Systems Location: 671, Finchley Road, London, NW2 2JP Classification: Photocopiers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	801	-	525048 186263
70	**Contemporary Trade Directory Entries** Name: Photocopiers Direct Ltd Location: 671, Finchley Road, London, NW2 2JP Classification: Photocopiers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	801	-	525048 186263
70	**Contemporary Trade Directory Entries** Name: Fix It Location: 679, Finchley Road, London, NW2 2JP Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	818	-	525046 186287
70	**Contemporary Trade Directory Entries** Name: Leyland S D M Location: 683-685, Finchley Road, London, NW2 2JP Classification: Painting & Decorating Supplies **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	830	-	525038 186295
71	**Contemporary Trade Directory Entries** Name: District J Location: 31, Hermitage Lane, London, NW2 2EY Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	794	-	525182 186387
72	**Contemporary Trade Directory Entries** Name: Hampstead Waste Location: Flat 68, Henderson Court, 102, Fitzjohns Avenue, London, NW3 6NR Classification: Medical Waste Disposal **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	801	-	526493 185498
73	**Contemporary Trade Directory Entries** Name: Cops & Cons Ltd Location: 2, Kingdon Road, London, NW6 1PH Classification: Copying & Duplicating Machines & Supplies **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	803	-	525419 184960

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	**Contemporary Trade Directory Entries** Name: Cleanline Location: First Floor, 307, Finchley Road, London, NW3 6EH Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	807	-	526109 185007
74	**Contemporary Trade Directory Entries** Name: London Crystal Ltd Location: 307c, Finchley Road, London, NW3 6EH Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	807	-	526109 185007
74	**Contemporary Trade Directory Entries** Name: Cleanline Location: 307C, Finchley Road, London, NW3 6EH Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	807	-	526109 185007
74	**Contemporary Trade Directory Entries** Name: Clean Line Location: 307c, Finchley Road, London, NW3 6EH Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	807	-	526109 185007
74	**Contemporary Trade Directory Entries** Name: Home Needs Location: 301-303, Finchley Road, London, NW3 6DT Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	836	-	526128 184985
74	**Contemporary Trade Directory Entries** Name: Maximal Company Location: 301-303, Finchley Road, London, NW3 6DT Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	836	-	526128 184985
75	**Contemporary Trade Directory Entries** Name: Prestige Dry Cleaning & Laundry Location: 35b, Mill Lane, London, NW6 1NB Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	811	-	525058 185223
76	**Contemporary Trade Directory Entries** Name: Mellau Location: The Studio Canterbury Mansions, Lymington Road, London, NW6 1SE Classification: Carpets & Rugs - Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	813	-	525539 184913
76	**Contemporary Trade Directory Entries** Name: Masland Carpets Location: Flat 1, Canterbury Mansions, Lymington Road, London, NW6 1SE Classification: Carpets & Rugs - Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8SW (S)	813	-	525539 184913
76	**Contemporary Trade Directory Entries** Name: Colour Division Location: 168, West End Lane, London, NW6 1SD Classification: Copying & Duplicating Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	826	-	525537 184900
76	**Contemporary Trade Directory Entries** Name: Colour Division Ltd Location: 168, West End Lane, London, NW6 1SD Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	833	-	525537 184894
76	**Contemporary Trade Directory Entries** Name: Colour Division Location: 168, West End Lane, London, NW6 1SD Classification: Copying & Duplicating Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	833	-	525537 184894

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
76	**Contemporary Trade Directory Entries** Name: Colour Division Ltd Location: 168, West End Lane, London, NW6 1SD Classification: Copying & Duplicating Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	833	-	525537 184894
76	**Contemporary Trade Directory Entries** Name: Madam George Dry Cleaners Location: 227, West End Lane, London, NW6 1XJ Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	850	-	525503 184883
76	**Contemporary Trade Directory Entries** Name: Central Pharmacy Location: 227 West End Lane, London, NW6 1XJ Classification: Chemists' & Pharmacists' Suppliers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	851	-	525503 184883
76	**Contemporary Trade Directory Entries** Name: Carmel Olefins Location: 215, West End Lane, London, NW6 1XJ Classification: Plastics - Raw Materials **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	881	-	525481 184858
77	**Contemporary Trade Directory Entries** Name: Speedy Motors Location: 6, Devonshire Place, London, NW2 2HX Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	827	-	525082 186340
78	**Contemporary Trade Directory Entries** Name: Timberwise Uk Ltd Location: 176, Finchley Road, London, NW3 6BT Classification: Damp & Dry Rot Control **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	835	-	526169 185011
78	**Contemporary Trade Directory Entries** Name: London Boys Scrap Yards In Hampstead Location: 176, Finchley Road, London, NW3 6BT Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	835	-	526169 185011
78	**Contemporary Trade Directory Entries** Name: Posh Clean Uk Location: 176, Finchley Road, London, NW3 6BT Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	835	-	526169 185011
78	**Contemporary Trade Directory Entries** Name: London Scrap Yards Hampstead Location: 176, Finchley Road, London, NW3 6BT Classification: Car Breakers & Dismantlers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	835	-	526169 185011
78	**Contemporary Trade Directory Entries** Name: Online Plumbing Location: 176, Finchley Road, London, NW3 6BT Classification: Boilers - Servicing, Replacements & Repairs **Status: Active** Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	835	-	526169 185011
78	**Contemporary Trade Directory Entries** Name: Accel Pest Control Location: 176, Finchley Road, London, NW3 6BT Classification: Pest & Vermin Control **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	835	-	526169 185011
78	**Contemporary Trade Directory Entries** Name: A Professional Domestic Service Location: 176, Finchley Road, London, NW3 6BT Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	835	-	526169 185011

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	**Contemporary Trade Directory Entries** Name: 1st Damp Line Ltd Location: 176, Finchley Road, London, NW3 6BT Classification: Damp & Dry Rot Control **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	835	-	526169 185011
79	**Contemporary Trade Directory Entries** Name: Natmet Ltd Location: A, 35, Lithos Road, London, NW3 6DX Classification: Metal Industries - Primary **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SE (S)	835	-	526027 184936
80	**Contemporary Trade Directory Entries** Name: Sage Cars Ltd Location: Prospect Road, London, NW2 2JT Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A17SW (NW)	844	-	524998 186268
81	**Contemporary Trade Directory Entries** Name: Absolute Chiropractic Ltd Location: 21a, Dennington Park Road, London, NW6 1BB Classification: Sand, Gravel & Other Aggregates **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	846	-	525322 184956
82	**Contemporary Trade Directory Entries** Name: Victory Motorcycles London Location: 15, Rosemont Road, London, NW3 6NG Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	846	-	526054 184936
82	**Contemporary Trade Directory Entries** Name: R S Auto Location: 9, Rosemont Road, London, NW3 6NG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	851	-	526093 184948
82	**Contemporary Trade Directory Entries** Name: Transeuropean Logistic Services Location: Suite 4,11 Rosemont Road, London, NW3 6NG Classification: Road Haulage Services **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9SW (SE)	852	-	526093 184948
82	**Contemporary Trade Directory Entries** Name: Porchetech Location: 9, Rosemont Road, London, NW3 6NG Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	852	-	526093 184948
82	**Contemporary Trade Directory Entries** Name: Ron'S Garage Location: 6, Rosemont Road, London, NW3 6NE Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	877	-	526122 184934
82	**Contemporary Trade Directory Entries** Name: Vats It Ltd Location: 18-20, Rosemont Road, London, NW3 6NE Classification: Tanks, Vats & Cisterns **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	877	-	526079 184912
82	**Contemporary Trade Directory Entries** Name: Carmel Motors Location: 16, Rosemont Road, London, NW3 6NE Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	879	-	526088 184915
82	**Contemporary Trade Directory Entries** Name: Graffiti Art Ltd Location: 16, Rosemont Road, London, NW3 6NE Classification: Packaging & Wrapping Equipment & Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	879	-	526088 184915

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
83	**Contemporary Trade Directory Entries** Name: Cleaners Of Hampstead Location: 15, Hampstead High Street, London, NW3 1PX Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	852	-	526573 185667
83	**Contemporary Trade Directory Entries** Name: Cleaners Of Hampstead Location: 15, Hampstead High Street, London, NW3 1PX Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	852	-	526573 185667
84	**Contemporary Trade Directory Entries** Name: Travis Perkins Plc Location: 156, West End Lane, London, NW6 1UF Classification: Builders' Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	854	-	525561 184867
85	**Contemporary Trade Directory Entries** Name: Ostro Minerals Uk Ltd Location: 420, Finchley Road, London, NW2 2HY Classification: Mineral Merchants **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A17SE (NW)	859	-	525071 186374
85	**Contemporary Trade Directory Entries** Name: Crystalline Dry Cleaners Ltd Location: 450, Finchley Road, London, NW2 2HY Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	888	-	525072 186416
85	**Contemporary Trade Directory Entries** Name: Stewart Chubb Cars Ltd Location: 707, Finchley Road, London, NW2 2JN Classification: Car Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	902	-	525043 186407
86	**Contemporary Trade Directory Entries** Name: Maher Martin N Location: 30, Pandora Road, London, NW6 1TT Classification: Boilers - Servicing, Replacements & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	871	-	525220 184988
86	**Contemporary Trade Directory Entries** Name: Jane Zagel Location: 31, Pandora Road, London, NW6 1TS Classification: Art Restoration & Picture Cleaning **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	906	-	525223 184945
87	**Contemporary Trade Directory Entries** Name: Spring Cleaning Location: 57, Lithos Road, London, NW3 6EY Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (S)	878	-	525973 184871
87	**Contemporary Trade Directory Entries** Name: Dexsil-Vitasil Distributor Within Agedefy Ltd Location: 38, Rosemont Road, London, NW3 6NE Classification: Distribution Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (S)	883	-	526019 184881
88	**Contemporary Trade Directory Entries** Name: Multiload Technology Ltd Location: 2, Rosemont Road, London, NW3 6NE Classification: Lighting Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	879	-	526145 184945
88	**Contemporary Trade Directory Entries** Name: Printing Works The Location: 287, Finchley Road, London, NW3 6ND Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	888	-	526157 184941

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	**Contemporary Trade Directory Entries** Name: Ariana Hand Laundry Location: 281a, Finchley Road, London, NW3 6ND Classification: Laundries & Launderettes **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	908	-	526164 184922
88	**Contemporary Trade Directory Entries** Name: American Wheels Location: 16, Frognal Parade, London, NW3 5HH Classification: Car Customisation & Conversion Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	917	-	526207 184939
88	**Contemporary Trade Directory Entries** Name: Clothes Clinic Location: 279a, Finchley Road, London, NW3 6LT Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	931	-	526174 184901
88	**Contemporary Trade Directory Entries** Name: Clothes Clinic Location: 279a, Finchley Road, LONDON, NW3 6LT Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	931	-	526174 184901
88	**Contemporary Trade Directory Entries** Name: Siciliana Dry Cleaners Location: 12, Frognal Parade, London, NW3 5HH Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	937	-	526213 184918
89	**Contemporary Trade Directory Entries** Name: Cleaners Hampstead Location: 8, Hampstead High Street, London, NW3 1PR Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	893	-	526614 185656
89	**Contemporary Trade Directory Entries** Name: Radici Plastics Uk Location: 6a, Hampstead High Street, London, NW3 1PR Classification: Plaster Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	905	-	526626 185654
90	**Contemporary Trade Directory Entries** Name: S E Ltd Location: 8, Frognal, London, NW3 6AJ Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (SE)	903	-	526253 184987
91	**Contemporary Trade Directory Entries** Name: Norman Motors Ltd Location: 100, Mill Lane, London, NW6 1NF Classification: Classic Car Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	907	-	524988 185158
91	**Contemporary Trade Directory Entries** Name: Sara Soft Furnishing Location: 98, Mill Lane, London, NW6 1NF Classification: Soft Furnishings - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	913	-	524981 185156
91	**Contemporary Trade Directory Entries** Name: The Print Corporation Location: 88, Mill Lane, London, NW6 1NL Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	947	-	524945 185147
92	**Contemporary Trade Directory Entries** Name: Simportex Ltd Location: A, 452, Finchley Road, London, NW11 8DG Classification: Non-Ferrous Metals **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	908	-	525081 186451

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
93	**Contemporary Trade Directory Entries** Name: Cleaneasy Location: 20, Hillfield Road, London, NW6 1PZ Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	952	-	524904 185193
93	**Contemporary Trade Directory Entries** Name: Dales Cleaning Specialists Location: 10, Hillfield Road, London, NW6 1PZ Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	980	-	524875 185185
94	**Contemporary Trade Directory Entries** Name: Zybi Construction Location: 84, Mill Lane, London, NW6 1NL Classification: Window Frame Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A7NW (SW)	956	-	524936 185145
95	**Contemporary Trade Directory Entries** Name: Mercedes Benz Location: Blackburn Road, London, NW6 1RZ Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	957	-	525655 184753
96	**Contemporary Trade Directory Entries** Name: Vacuum Cleaner Location: Flat 7, Heathway Court, Finchley Road, London, NW3 7TS Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	961	-	525107 186541
97	**Contemporary Trade Directory Entries** Name: Bp Express Location: 713, Finchley Road, London, NW11 8DH Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	961	-	525037 186484
98	**Contemporary Trade Directory Entries** Name: Snappy Snaps Location: 80, Rosslyn Hill, London, NW3 1ND Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	967	-	526685 185626
98	**Contemporary Trade Directory Entries** Name: Fast Cash 4 Scrap Cars London Aeg Location: 64, Rosslyn Hill, London, NW3 1ND Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	990	-	526708 185619
99	**Contemporary Trade Directory Entries** Name: Topcret Uk Ltd Location: Unit 4, Hampstead West, 224, Iverson Road, London, NW6 2HL Classification: Floorcoverings - Manufacturers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	974	-	525461 184766
99	**Contemporary Trade Directory Entries** Name: James Hugh Group Ltd Location: Unit 5, 224, Iverson Road, London, NW6 2HL Classification: Temperature Monitoring Systems Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	977	-	525451 184766
99	**Contemporary Trade Directory Entries** Name: Quality Monitoring Instruments Ltd Location: Unit 5, 224, Iverson Road, London, NW6 2HL Classification: Marine Engineering Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	977	-	525451 184766
99	**Contemporary Trade Directory Entries** Name: Rueger Location: Unit 5, 224, Iverson Road, London, NW6 2HL Classification: Temperature Monitoring Systems Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	977	-	525451 184766

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
99	**Contemporary Trade Directory Entries** Name: Tempkey Location: Unit 5, 224, Iverson Road, London, NW6 2HL Classification: Temperature Monitoring Systems Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	977	-	525451 184766
99	**Contemporary Trade Directory Entries** Name: Temperature Technology Chart Recorders Location: Unit 5, 224, Iverson Road, London, NW6 2HL Classification: Temperature Monitoring Systems Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	977	-	525451 184766
99	**Contemporary Trade Directory Entries** Name: G E P Uk Location: 224 Iverson Road, London, NW6 2HL Classification: Oil & Gas Exploration Supplies & Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	984	-	525465 184755
99	**Contemporary Trade Directory Entries** Name: M Waldman Ltd Location: Unit 8, 224, Iverson Road, London, NW6 2HL Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	1000	-	525476 184736
100	**Contemporary Trade Directory Entries** Name: Alan Day Volkswagen Location: 277, Finchley Road, London, NW3 6LT Classification: Car Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NE (S)	990	-	525774 184721
100	**Contemporary Trade Directory Entries** Name: Alan Day Location: 277, Finchley Road, London, NW3 6LT Classification: Commercial Vehicle Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (S)	990	-	525774 184721
100	**Contemporary Trade Directory Entries** Name: Alan Day Location: 277, Finchley Road, London, NW3 6LT Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (S)	990	-	525774 184721
101	**Contemporary Trade Directory Entries** Name: Iverson Tyres Ltd Location: 159-161, Iverson Road, London, NW6 2RB Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (S)	995	-	525313 184796
102	**Fuel Station Entries** Name: Fortune Green Service Station Location: 63-65, Fortune Green Road , Fortune Green , London, Inner London, NW6 1DR Brand: Texaco Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Manually positioned to the road within the address or location	A12SE (W)	577	-	525113 185609
103	**Fuel Station Entries** Name: Cavendish Motors Location: West End Lane , , London, Inner London, NW6 1XF Brand: OBSOLETE Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Manually positioned to the road within the address or location	A8NW (SW)	592	-	525412 185197
104	**Fuel Station Entries** Name: The Tower Service Station Location: 617, Finchley Road Burgess Hill, Cricklewood , London, Outer London, NW3 7BS Brand: ESSO Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	671	-	525052 186022

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
105	**Fuel Station Entries** Name: Castle Service Centre Location: 713, Finchley Road Cricklewood Lane, Golders Green , London, Outer London, NW11 8DG Brand: Unbranded Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Located by supplier to within 10m	A17NE (NW)	939	-	525042 186458
106	**Points of Interest - Commercial Services** Name: S M D Recycling Location: 461 Finchley Road, London, NW3 6HN Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A8NW (S)	400	9	525678 185310
106	**Points of Interest - Commercial Services** Name: Carmel Garage Location: 322 West End Lane, London, NW6 1LN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (S)	417	9	525630 185299
107	**Points of Interest - Commercial Services** Name: Overseas Marine & Transport Location: Flat 4 20, Lindfield Gardens, London, NW3 6PS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8NE (SE)	439	9	525998 185378
108	**Points of Interest - Commercial Services** Name: 24 Hour Euro Windscreen Ltd Location: 571 Finchley Road, London, NW3 7BN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	498	9	525173 185793
108	**Points of Interest - Commercial Services** Name: Pack in Solutions Ltd Location: 571 Finchley Road, London, NW3 7BN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	498	9	525173 185793
109	**Points of Interest - Commercial Services** Name: Karkhana Autotronic Location: West Heath Yard 174, Mill Lane, London, NW6 1TB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	615	9	525357 185204
109	**Points of Interest - Commercial Services** Name: Woodstock Motors Location: West Heath Yard 174, Mill Lane, London, NW6 1TB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	615	9	525357 185204
110	**Points of Interest - Commercial Services** Name: Hampstead Auto Centre Location: 1 Pattison Road, London, NW2 2HL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	736	9	525111 186236
110	**Points of Interest - Commercial Services** Name: Twinspark Hampstead Ltd Location: A 1 Pattison Road, London, NW2 2HL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	736	9	525111 186236
110	**Points of Interest - Commercial Services** Name: Twinspark Location: 1a Pattison Road, London, NW2 2HL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	736	9	525111 186236

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
110	**Points of Interest - Commercial Services** Name: Twinspark Hampstead Location: 1a Pattison Road, London, NW2 2HL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	736	9	525111 186236
110	**Points of Interest - Commercial Services** Name: Rigde Garage Location: Prospect Road, London, NW2 2JT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	791	9	525038 186234
110	**Points of Interest - Commercial Services** Name: Ridge Garage Ltd Location: Prospect Road, London, NW2 2JT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	791	9	525038 186233
110	**Points of Interest - Commercial Services** Name: Rigde Garage Location: Prospect Road, London, NW2 2JT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	791	9	525038 186234
110	**Points of Interest - Commercial Services** Name: Ridge Garage Location: 1 Prospect Road, London, NW2 2JT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	794	9	525037 186237
111	**Points of Interest - Commercial Services** Name: Julian Hand Car Wash Hampstead Ltd Location: 6 Devonshire Place, London, NW2 2HX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A17SE (NW)	756	9	525117 186274
111	**Points of Interest - Commercial Services** Name: Speedy Motors Location: 6 Devonshire Place, London, NW2 2HX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	827	9	525082 186340
111	**Points of Interest - Commercial Services** Name: Speedy Motors Location: 6 Devonshire Place, London, NW2 2HX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	827	9	525082 186340
111	**Points of Interest - Commercial Services** Name: Auto Sistem Location: 6 Devonshire Place, London, NW2 2HX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	827	9	525082 186340
111	**Points of Interest - Commercial Services** Name: Julian Hand Car Wash Location: 6 Devonshire Place, London, NW2 2HX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A17SE (NW)	827	9	525082 186340
112	**Points of Interest - Commercial Services** Name: Automotive Couture UK Ltd Location: 186 Finchley Road, London, NW3 6BX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	809	9	526151 185030
113	**Points of Interest - Commercial Services** Name: E-numberplates Location: 176 Finchley Road, London, NW3 6BT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	835	9	526169 185011

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
113	**Points of Interest - Commercial Services** Name: London Scrap Yards Hampstead Location: 176 Finchley Road, London, NW3 6BT Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A9SW (SE)	835	9	526169 185011
113	**Points of Interest - Commercial Services** Name: American Wheels Location: 16 Frognal Parade, London, NW3 5HH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	917	9	526207 184939
114	**Points of Interest - Commercial Services** Name: Victory Motorcycles London Location: 15 Rosemont Road, London, NW3 6NG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	846	9	526054 184936
114	**Points of Interest - Commercial Services** Name: Transeuropean Logistic Services Location: 11 Rosemont Road, London, NW3 6NG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9SW (SE)	851	9	526088 184946
114	**Points of Interest - Commercial Services** Name: Porchetech Location: 9 Rosemont Road, London, NW3 6NG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	851	9	526093 184948
114	**Points of Interest - Commercial Services** Name: Porchetech Location: 9 Rosemont Road, London, NW3 6NG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	851	9	526092 184948
114	**Points of Interest - Commercial Services** Name: Carmel Motors Location: 16 Rosemont Road, London, NW3 6NE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	879	9	526088 184915
114	**Points of Interest - Commercial Services** Name: Carmel Motors Location: 16 Rosemont Road, London, NW3 6NE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	879	9	526088 184915
114	**Points of Interest - Commercial Services** Name: Dexsil-vitasil Distributor Within Agedefy Ltd Location: 38 Rosemont Road, London, NW3 6NE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8SE (S)	883	9	526019 184881
115	**Points of Interest - Commercial Services** Name: Norman Motors Location: 100 Mill Lane, London, NW6 1NF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	906	9	524988 185158
116	**Points of Interest - Education and Health** Name: The Royal Free Hospital Location: 30 Spedan Close, London, NW3 7XF Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A13NE (NE)	387	9	525961 186033
117	**Points of Interest - Education and Health** Name: Queen Marys House Location: 23 East Heath Road, London, NW3 1DU Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A19SW (NE)	807	9	526353 186225

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
117	**Points of Interest - Education and Health** Name: Piercey Day Hospital Location: 23 East Heath Road, London, NW3 1DU Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A19SE (NE)	828	9	526380 186224
118	**Points of Interest - Manufacturing and Production** Name: Stone of London Location: 485 Finchley Road, London, NW3 6HS Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A8NW (S)	357	9	525601 185368
119	**Points of Interest - Manufacturing and Production** Name: Works Location: NW6 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	645	9	525324 185191
119	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	647	9	525326 185187
120	**Points of Interest - Manufacturing and Production** Name: Works Location: NW6 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	981	9	525584 184735
121	**Points of Interest - Public Infrastructure** Name: Grave Yard Location: NW3 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	518	9	526241 185701
121	**Points of Interest - Public Infrastructure** Name: Graveyard Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	526	9	526249 185702
122	**Points of Interest - Public Infrastructure** Name: West Hampstead Fire Station Location: West Hampstead Fire Station 325, West End Lane, London, NW6 1RR Category: Central and Local Government Class Code: Fire Brigade Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	608	9	525394 185189
123	**Points of Interest - Public Infrastructure** Name: Highgate Safer Neighbourhoods Base Location: West Hampstead Police Station 21, Fortune Green Road, London, NW6 1DX Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A12SE (SW)	613	9	525166 185409
123	**Points of Interest - Public Infrastructure** Name: West Hampstead Police Station Location: West Hampstead Police Station 21, Fortune Green Road, London, NW6 1DX Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A12SE (SW)	613	9	525166 185409
124	**Points of Interest - Public Infrastructure** Name: Hampstead Cemetery Location: NW6 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	619	9	525054 185701
125	**Points of Interest - Public Infrastructure** Name: Esso Location: 617 Finchley Road, London, NW3 7BS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12NE (NW)	660	9	525064 186019

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
125	**Points of Interest - Public Infrastructure** Name: Esso Location: 617 Finchley Road, London, NW3 7BS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12NE (NW)	671	9	525052 186022
125	**Points of Interest - Public Infrastructure** Name: Esso Service Station Location: 617 Finchley Road, London, NW3 7BS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12NE (NW)	671	9	525052 186022
125	**Points of Interest - Public Infrastructure** Name: Tower (The) Service Station Location: 617 Finchley Road, London, NW3 7BS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12NE (NW)	671	9	525052 186022
125	**Points of Interest - Public Infrastructure** Name: The Tower Service Station Location: 617 Finchley Road, London, NW3 7BS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12NE (NW)	671	9	525052 186022
126	**Points of Interest - Public Infrastructure** Name: Finchley Road & Frognal Rail Station Location: Finchley Road, NW3 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A9SW (SE)	761	9	526047 185026
126	**Points of Interest - Public Infrastructure** Name: Finchley Road and Frognal Station Location: Finchley Road, NW3 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A9SW (SE)	761	9	526047 185026
127	**Points of Interest - Public Infrastructure** Name: Hampstead Cemetery Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	813	9	524870 185612
127	**Points of Interest - Public Infrastructure** Name: Hampstead Cemetery Location: NW6 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	813	9	524870 185612
128	**Points of Interest - Public Infrastructure** Name: West Hampstead Thameslink Rail Station Location: Sumatra Road, NW6 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A8SW (S)	907	9	525424 184847
128	**Points of Interest - Public Infrastructure** Name: West Hampstead Thameslink Station Location: Sumatra Road, NW6 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A8SW (S)	907	9	525424 184847
129	**Points of Interest - Public Infrastructure** Name: Hampstead Cemetery Location: NW6 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	911	9	524801 185486
130	**Points of Interest - Public Infrastructure** Name: BP Express Shopping Ltd Location: 713 Finchley Road, London, NW11 8DL Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A17NE (NW)	961	9	525033 186479

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
131	**Points of Interest - Recreational and Environmental** Name: Play Centre Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	669	9	525027 185573
132	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	673	9	525303 185172
132	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Holmdale Road, NW6 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A7NE (SW)	675	9	525303 185170
133	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	824	9	525459 184923
133	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Sandwell Crescent, NW6 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8SW (S)	825	9	525456 184923
134	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7SE (SW)	937	9	525137 184966
134	**Points of Interest - Recreational and Environmental** Name: Playground Location: Sumatra Road, NW6 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A7SE (SW)	953	9	525123 184957
135	**Underground Electrical Cables** Unique Feature Identifier: 265526 Cable Status: Commissioned Cable Type: Pilot (Communication) Record Last Updated: 4th June 2013	A14NE (E)	937	10	526644 185895
136	**Underground Electrical Cables** Unique Feature Identifier: 265406 Cable Status: Commissioned Cable Type: Pilot (Communication) Record Last Updated: 4th June 2013	A14NE (E)	939	10	526645 185896
137	**Underground Electrical Cables** Unique Feature Identifier: 265404 Cable Status: Commissioned Cable Type: Pilot (Communication) Record Last Updated: 4th June 2013	A14NE (E)	978	10	526671 185961
138	**Underground Electrical Cables** Unique Feature Identifier: 265528 Cable Status: Commissioned Cable Type: Pilot (Communication) Record Last Updated: 4th June 2013	A14NE (E)	982	10	526674 185967

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
139	**Underground Electrical Cables** Unique Feature Identifier: 265547 Cable Status: Commissioned Cable Type: Pilot (Communication) Record Last Updated: 4th June 2013	A9NE (E)	985	10	526639 185355
140	**Underground Electrical Cables** Unique Feature Identifier: 265405 Cable Status: Commissioned Cable Type: Pilot (Communication) Record Last Updated: 4th June 2013	A9NE (E)	987	10	526640 185354

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
London Borough of Barnet - Environmental Health Department	January 2015	Annual Rolling Update
London Borough of Camden - Pollution Projects Team	March 2013	Annual Rolling Update
Royal Borough of Kensington And Chelsea - Environmental Services	May 2014	Annual Rolling Update
London Borough of Ealing - Environmental Health and Trading Standards Division	October 2013	Annual Rolling Update
London Borough of Haringey - Planning and Environmental Health	October 2014	Annual Rolling Update
Westminster City Council - Environmental Health Department	October 2014	Annual Rolling Update
London Borough of Hackney - Environmental Health Department	October 2017	Annual Rolling Update
London Borough of Hammersmith And Fulham - Environmental Health Department	September 2013	Annual Rolling Update
London Borough of Brent - Environmental Health Department	September 2014	Annual Rolling Update
London Borough of Islington - Public Protection	September 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - Thames Region	October 2019	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Thames Region	March 2013	Annual Rolling Update
Integrated Pollution Controls		
Environment Agency - Thames Region	October 2008	Variable
Integrated Pollution Prevention And Control		
Environment Agency - South East Region - North East Thames Area	October 2019	Quarterly
Environment Agency - Thames Region	October 2019	Quarterly
Local Authority Integrated Pollution Prevention And Control		
London Borough of Barnet - Environmental Health Department	April 2013	Variable
London Borough of Islington - Environmental Health Department	January 2015	Variable
London Borough of Ealing - Environmental Health and Trading Standards Division	July 2015	Variable
London Borough of Haringey - Planning and Environmental Health	June 2014	Variable
London Borough of Hammersmith And Fulham - Environmental Health Department	March 2014	Variable
London Borough of Hackney - Environmental Health Department	March 2015	Variable
London Borough of Brent - Environmental Health Department	March 2016	Variable
Westminster City Council - Environmental Health Department	November 2015	Variable
London Borough of Camden - Pollution Projects Team	October 2014	Variable
Royal Borough of Kensington And Chelsea - Environmental Health Department	September 2014	Variable
Local Authority Pollution Prevention and Controls		
London Borough of Barnet - Environmental Health Department	December 2014	Annual Rolling Update
London Borough of Islington - Environmental Health Department	January 2015	Annual Rolling Update
London Borough of Ealing - Environmental Health and Trading Standards Division	July 2015	Annual Rolling Update
London Borough of Haringey - Planning and Environmental Health	June 2014	Annual Rolling Update
London Borough of Hammersmith And Fulham - Environmental Health Department	March 2014	Annual Rolling Update
London Borough of Hackney - Environmental Health Department	March 2015	Annual Rolling Update
London Borough of Brent - Environmental Health Department	March 2016	Annual Rolling Update
Westminster City Council - Environmental Health Department	November 2015	Not Applicable
London Borough of Camden - Pollution Projects Team	October 2014	Annual Rolling Update
Royal Borough of Kensington And Chelsea - Environmental Health Department	September 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
London Borough of Barnet - Environmental Health Department	December 2014	Variable
London Borough of Islington - Environmental Health Department	January 2015	Variable
London Borough of Ealing - Environmental Health and Trading Standards Division	July 2015	Variable
London Borough of Haringey - Planning and Environmental Health	June 2014	Variable
London Borough of Hammersmith And Fulham - Environmental Health Department	March 2014	Variable
London Borough of Hackney - Environmental Health Department	March 2015	Variable
London Borough of Brent - Environmental Health Department	March 2016	Variable
Westminster City Council - Environmental Health Department	November 2015	Variable
London Borough of Camden - Pollution Projects Team	October 2014	Variable
Royal Borough of Kensington And Chelsea - Environmental Health Department	September 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	September 2019	

Agency & Hydrological	Version	Update Cycle
Pollution Incidents to Controlled Waters Environment Agency - Thames Region	September 1999	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Thames Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - Thames Region	March 2013	Annual Rolling Update
Registered Radioactive Substances Environment Agency - Thames Region	June 2016	
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region - North East Area	October 2019 October 2019	Quarterly Quarterly
Water Abstractions Environment Agency - Thames Region	October 2019	Quarterly
Water Industry Act Referrals Environment Agency - Thames Region	October 2017	Quarterly
Groundwater Vulnerability Map Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Source Protection Zones Environment Agency - Head Office	October 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2019	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2019	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	August 2019	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	August 2019	Quarterly
Flood Defences Environment Agency - Head Office	August 2019	Quarterly
OS Water Network Lines Ordnance Survey	July 2019	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability Environment Agency - Head Office	October 2013	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Environment Agency - Head Office	October 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Thames Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - South East Region - North East Thames Area	July 2018	Quarterly
Environment Agency - Thames Region - North East Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South East Region - North East Thames Area	October 2019	Quarterly
Environment Agency - Thames Region - North East Area	October 2019	Quarterly
Local Authority Landfill Coverage		
London Borough of Barnet	May 2000	Not Applicable
London Borough of Brent - Environmental Health Department	May 2000	Not Applicable
London Borough of Camden	May 2000	Not Applicable
London Borough of Ealing	May 2000	Not Applicable
London Borough of Hackney	May 2000	Not Applicable
London Borough of Hammersmith And Fulham - Environmental Health Department	May 2000	Not Applicable
London Borough of Haringey - Planning Department	May 2000	Not Applicable
London Borough of Islington - Environmental Health Department	May 2000	Not Applicable
Royal Borough of Kensington And Chelsea	May 2000	Not Applicable
Westminster City Council - Environmental Health Department	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
London Borough of Barnet	May 2000	Not Applicable
London Borough of Brent - Environmental Health Department	May 2000	Not Applicable
London Borough of Camden	May 2000	Not Applicable
London Borough of Ealing	May 2000	Not Applicable
London Borough of Hackney	May 2000	Not Applicable
London Borough of Hammersmith And Fulham - Environmental Health Department	May 2000	Not Applicable
London Borough of Haringey - Planning Department	May 2000	Not Applicable
London Borough of Islington - Environmental Health Department	May 2000	Not Applicable
Royal Borough of Kensington And Chelsea	May 2000	Not Applicable
Westminster City Council - Environmental Health Department	May 2000	Not Applicable
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites		
Environment Agency - Thames Region - North East Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Thames Region - North East Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - Thames Region - North East Area	June 2015	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
London Borough of Barnet	February 2016	Variable
London Borough of Camden	February 2016	Variable
London Borough of Ealing	February 2016	Variable
London Borough of Hackney	February 2016	Variable
London Borough of Haringey	February 2016	Variable
Royal Borough of Kensington And Chelsea	February 2016	Variable
Westminster City Council	February 2016	Variable
London Borough of Brent	January 2016	Variable
London Borough of Islington	October 2015	Variable
London Borough of Hammersmith And Fulham - Environmental Protection	September 2014	Variable
Planning Hazardous Substance Consents		
London Borough of Hammersmith And Fulham - Environmental Protection	August 2015	Variable
London Borough of Barnet	February 2016	Variable
London Borough of Camden	February 2016	Variable
London Borough of Ealing	February 2016	Variable
London Borough of Hackney	February 2016	Variable
London Borough of Haringey	February 2016	Variable
Royal Borough of Kensington And Chelsea	February 2016	Variable
Westminster City Council	February 2016	Variable
London Borough of Brent	January 2016	Variable
London Borough of Islington	October 2015	Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	October 2019	Bi-Annually
BGS Urban Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Urban Soil Chemistry Averages British Geological Survey - National Geoscience Information Service	October 2015	Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	July 2019	Quarterly
Fuel Station Entries Catalist Ltd - Experian	September 2019	Quarterly
Gas Pipelines National Grid	July 2014	
Points of Interest - Commercial Services PointX	September 2019	Quarterly
Points of Interest - Education and Health PointX	September 2019	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2019	Quarterly
Points of Interest - Public Infrastructure PointX	September 2019	Quarterly
Points of Interest - Recreational and Environmental PointX	September 2019	Quarterly
Underground Electrical Cables National Grid	December 2015	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	August 2018	Bi-Annually
Areas of Adopted Green Belt		
London Borough of Barnet	March 2019	As notified
London Borough of Ealing	March 2019	As notified
London Borough of Haringey	March 2019	As notified
Areas of Unadopted Green Belt		
London Borough of Barnet	March 2019	As notified
London Borough of Ealing	March 2019	As notified
London Borough of Haringey	March 2019	As notified
Areas of Outstanding Natural Beauty		
Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	March 2019	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	July 2019	Bi-Annually
National Parks		
Natural England	April 2017	Bi-Annually
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	
Ramsar Sites		
Natural England	April 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural England	March 2019	Bi-Annually
Special Areas of Conservation		
Natural England	June 2019	Bi-Annually
Special Protection Areas		
Natural England	April 2019	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Peter Brett Associates	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**London Borough of Camden - Pollution Projects Team** Seventh Floor, Town Hall Extension, Argyle Street, London, WC1H 8EQ	Telephone: 020 7278 4444 Fax: 020 7860 5713 Website: www.camden.gov.uk
4	**London Borough of Barnet - Environmental Health Department** Building 4, North London Business Park, Oakleigh Road South, London, N11 1NP	Telephone: 020 8359 2000 Fax: 020 8359 4999 Website: www.barnet.gov.uk
5	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
6	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
7	**London Borough of Camden** Town Hall, Judd Street, London, WC1H 9JE	Telephone: 020 7974 4444 Fax: 020 7974 6866 Email: info@camden.gov.uk Website: www.camden.gov.uk
8	**London Borough of Barnet - Land Charges** The Town Hall, The Burroughs, Hendon, LONDON, NW4 4BQ	Telephone: 0208 3592482 Fax: 0208 3592493 Website: www.barnet.gov.uk
9	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9966 Fax: 0844 844 9951 Email: helpdesk@landmark.co.uk Website: www.landmark.co.uk
11	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	TPGR	TAPLOW GRAVEL MEMBER	Sand and Gravel	Not Supplied - Wolstonian
	DHGR	Dollis Hill Gravel Member	Sand and Gravel	Not Supplied - Cromerian
	STGR	Stanmore Gravel Formation	Sand and Gravel	Not Supplied - Pleistocene

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	CLGB	Claygate Member	Clay, Silt and Sand	Not Supplied - Ypresian
	LC	London Clay Formation	Clay, Silt and Sand	Not Supplied - Ypresian
	BGS	Bagshot Formation	Sand	Not Supplied - Ypresian

GEA

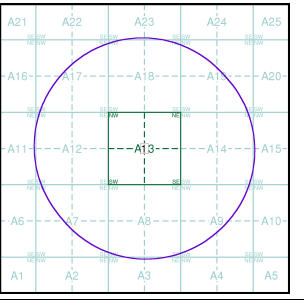
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	**1**
Map Sheet No:	**256**
Map Name:	**North London**
Map Date:	**2006**
Bedrock Geology:	**Available**
Superficial Geology:	**Available**
Artificial Geology:	**Available**
Faults:	**Not Supplied**
Landslip:	**Available**
Rock Segments:	**Not Supplied**

Geology 1:50,000 Maps - Slice A

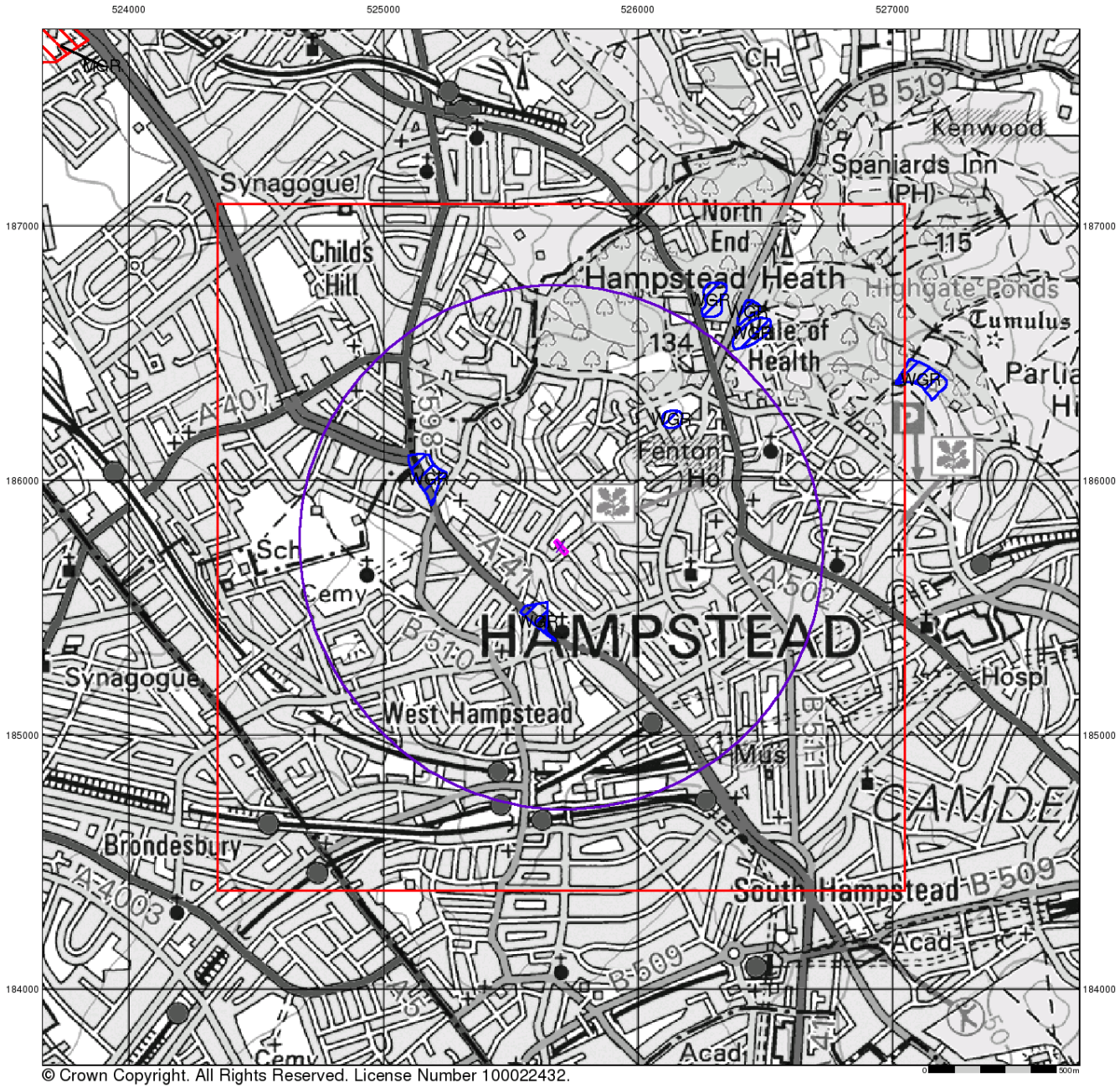


Order Details:

Order Number:	225359419_1_1
Customer Reference:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details:

8, Oakhill Avenue, LONDON, NW3 7RE



GEA

Artificial Ground and Landslip

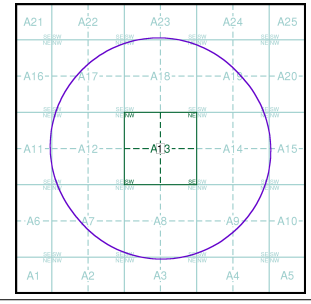
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order Details:

Order Number:	225359419_1_1
Customer Reference:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
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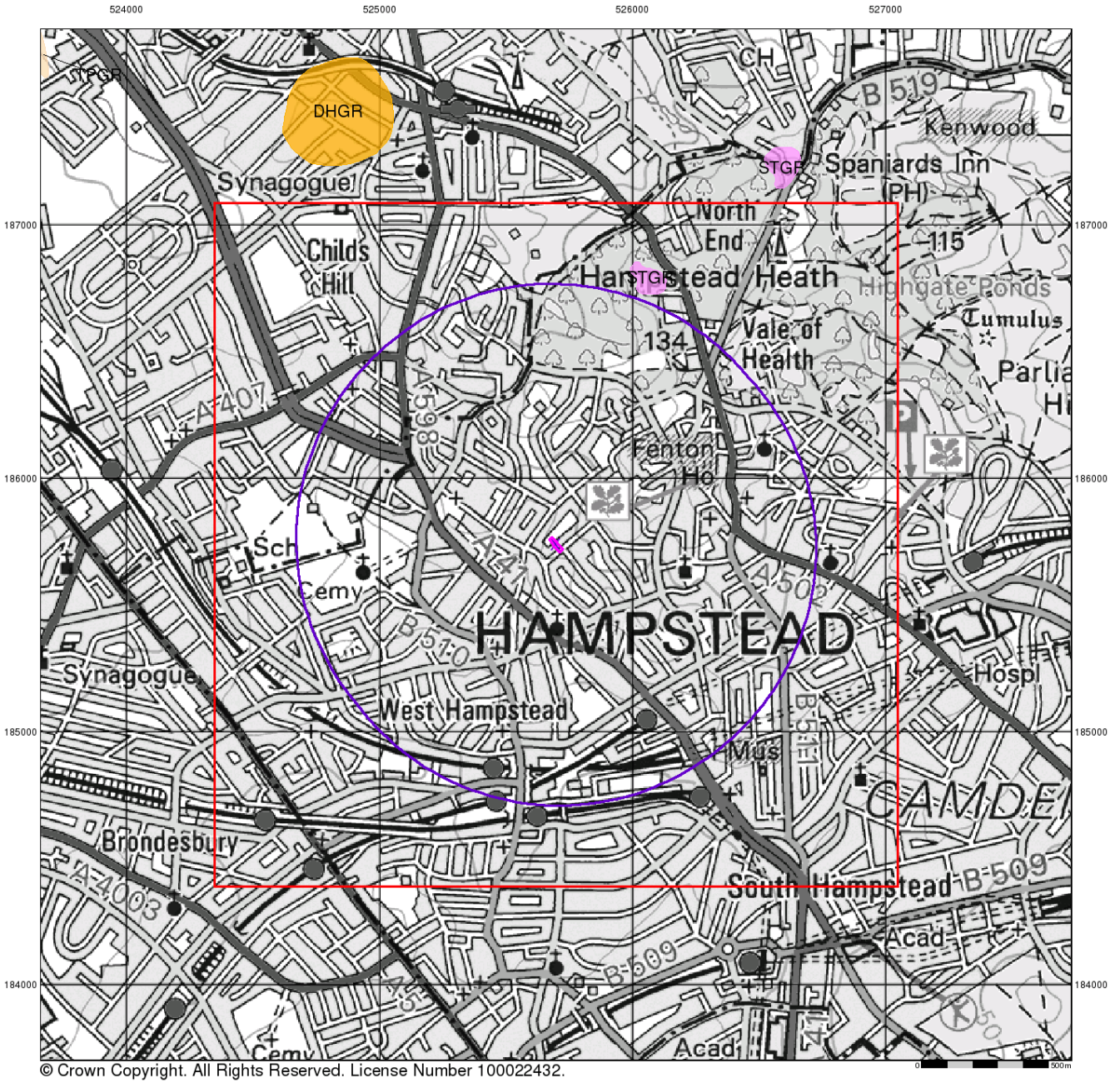
Site Details:

8, Oakhill Avenue, LONDON, NW3 7RE

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



GEA

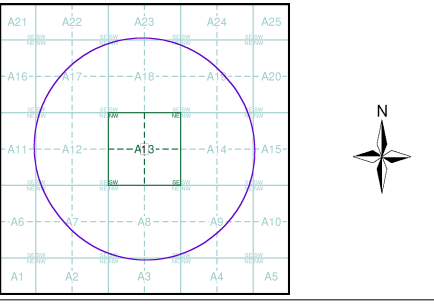
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details:

Order Number:	225359419_1_1
Customer Reference:	J19232
National Grid Reference:	525700, 185740
Slice:	A
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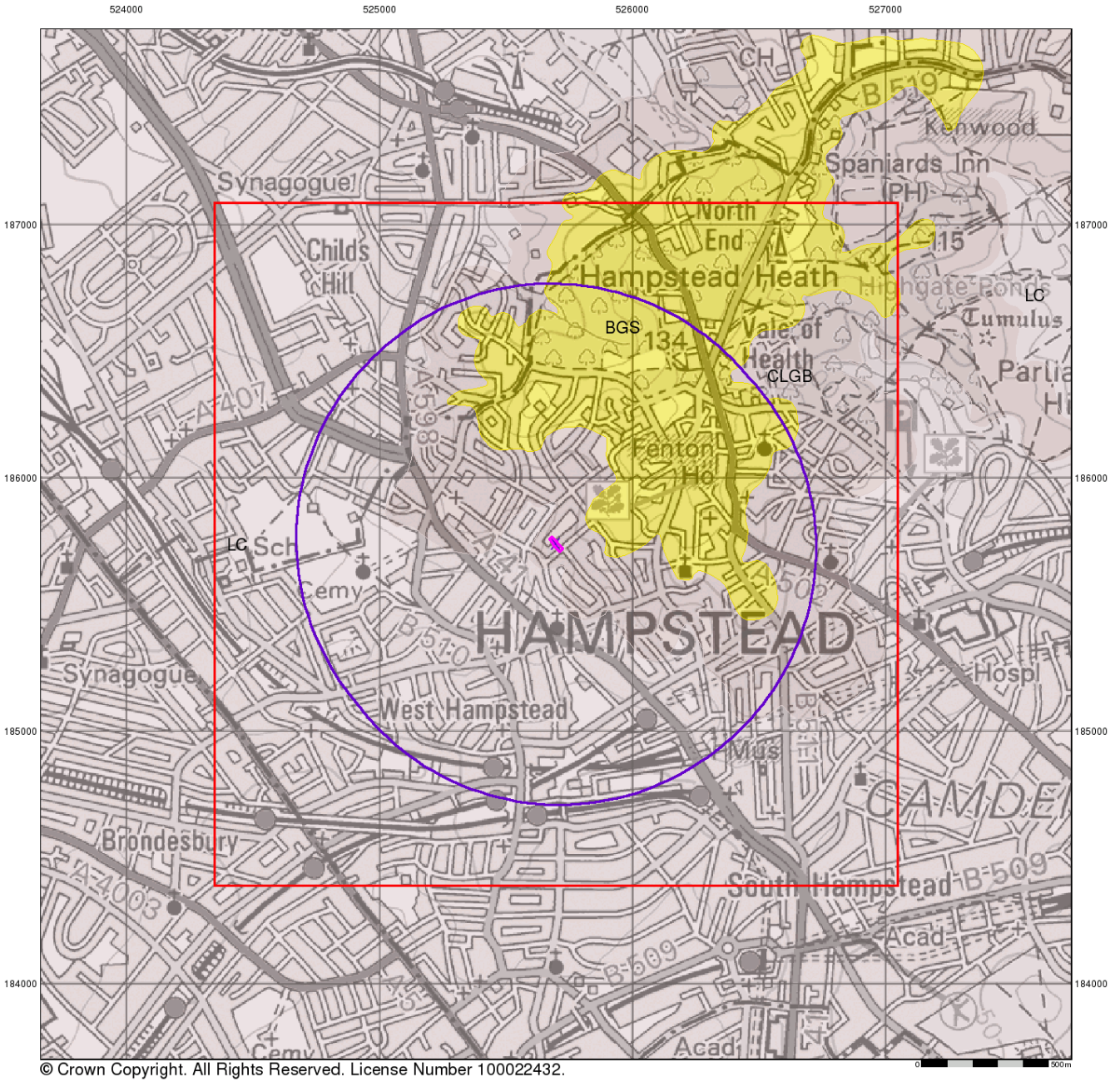


GEA

Bedrock and Faults

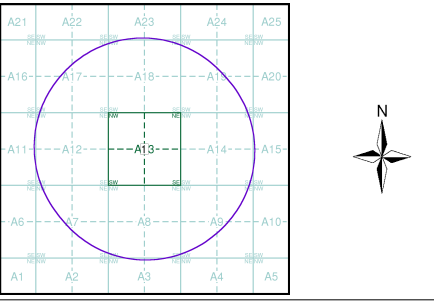
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

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Customer Reference:	J19232
National Grid Reference:	525700, 185740
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Site Area (Ha):	0.11
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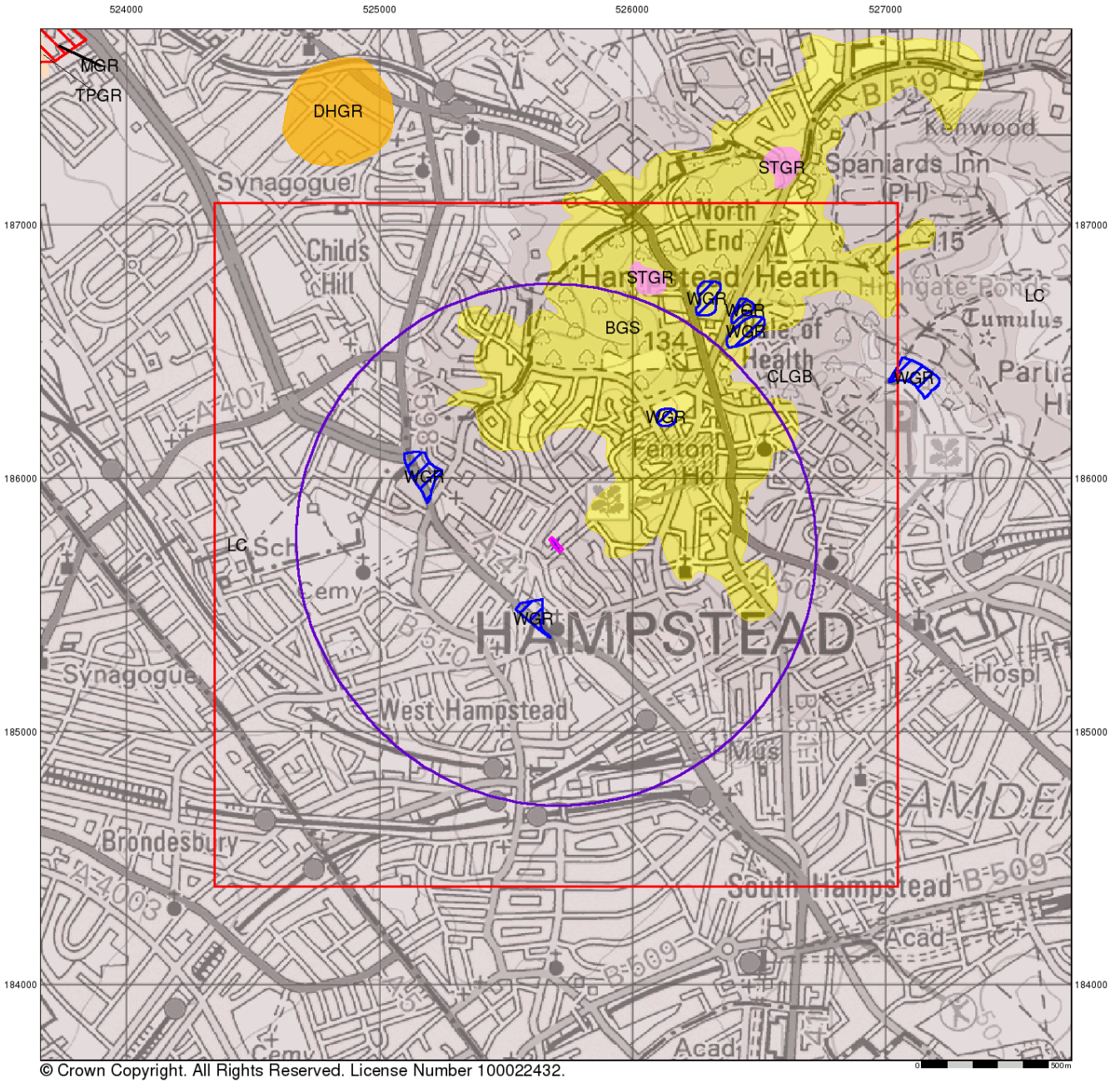

GEA

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
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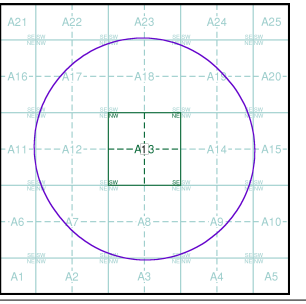
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



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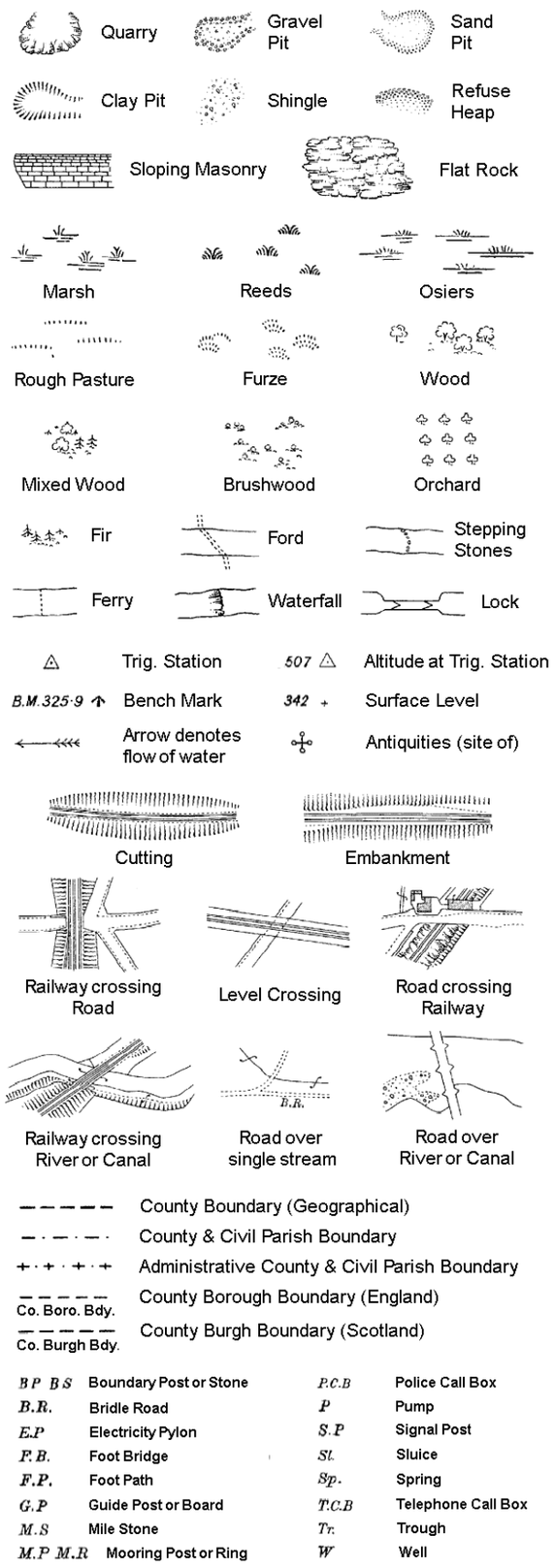
Order Number:	225359419_1_1
Customer Reference:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details:

8, Oakhill Avenue, LONDON, NW3 7RE

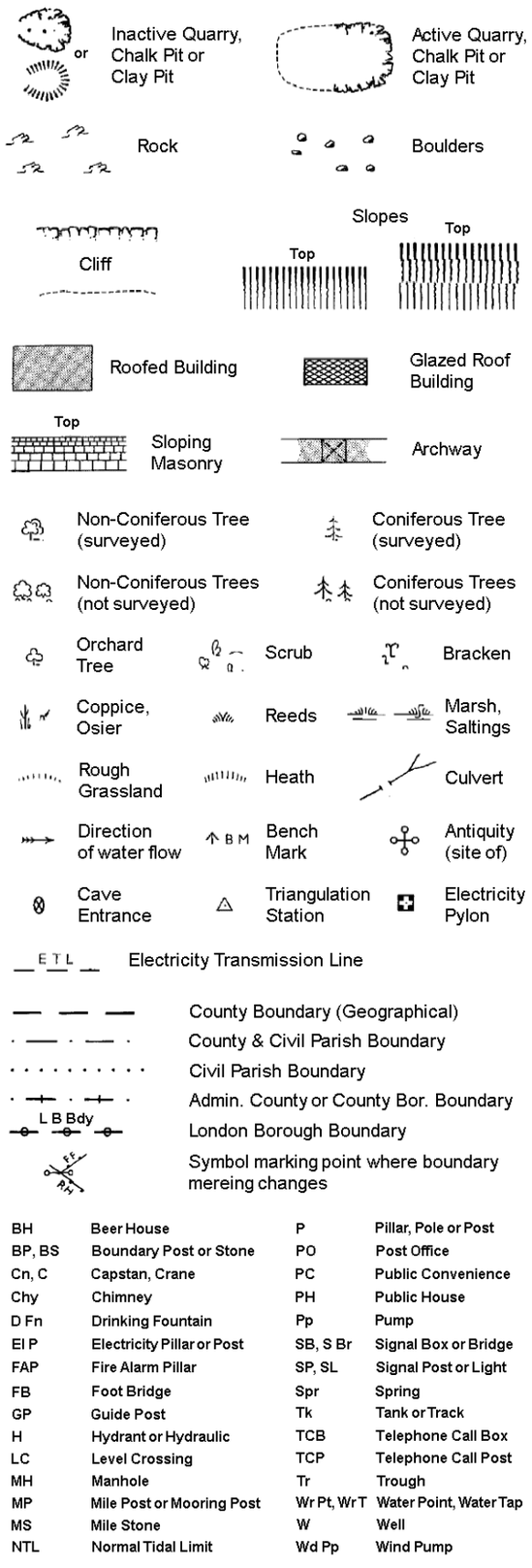
Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



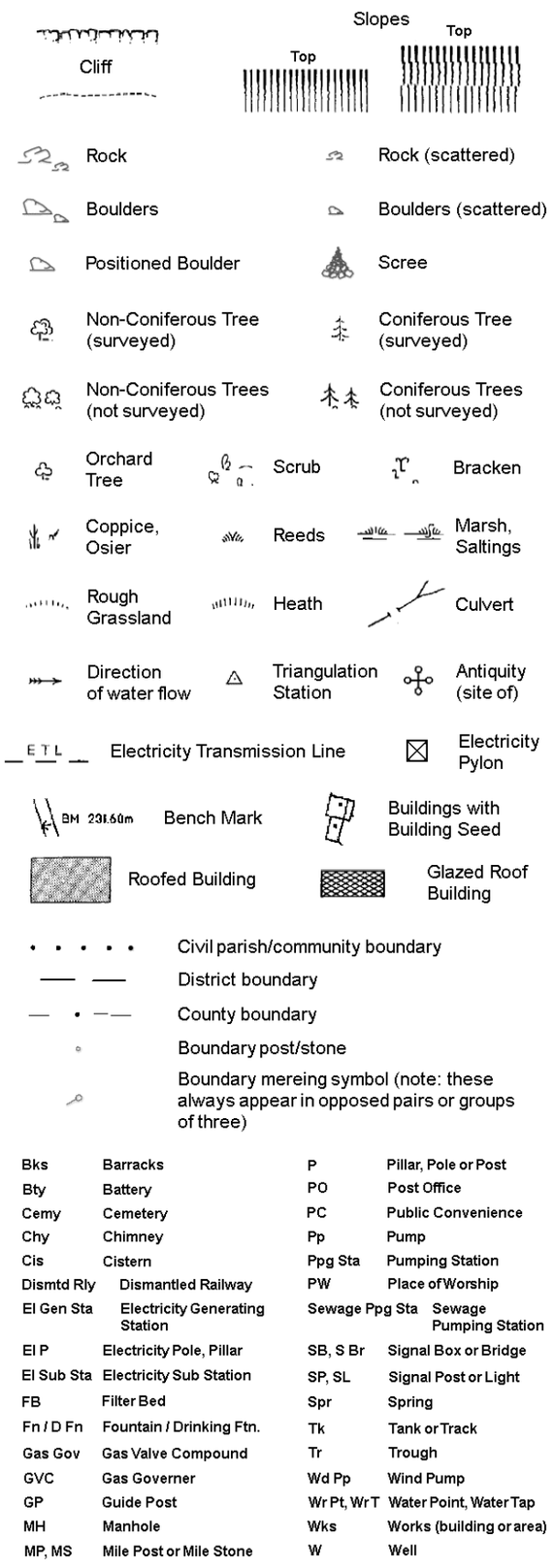
B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



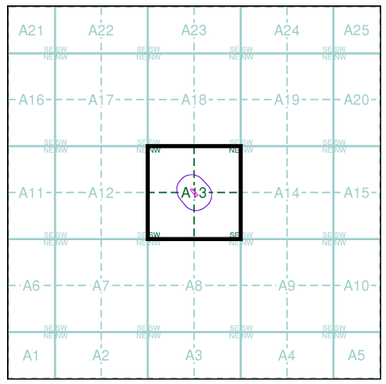
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

GEA

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Middlesex	1:2,500	1864	2
London	1:2,500	1879	3
London	1:2,500	1896	4
London	1:2,500	1915	5
London	1:2,500	1934	6
Historical Aerial Photography	1:1,250	1946 - 1949	7
Ordnance Survey Plan	1:2,500	1954 - 1955	8
Ordnance Survey Plan	1:1,250	1954	9
Additional SIMs	1:2,500	1954 - 1955	10
Additional SIMs	1:1,250	1954 - 1966	11
Ordnance Survey Plan	1:1,250	1962 - 1973	12
Ordnance Survey Plan	1:2,500	1969 - 1970	13
Ordnance Survey Plan	1:1,250	1971 - 1981	14
Supply of Unpublished Survey Information	1:1,250	1974	15
Ordnance Survey Plan	1:1,250	1981	16
Additional SIMs	1:1,250	1986	17
Large-Scale National Grid Data	1:1,250	1991	18
Large-Scale National Grid Data	1:1,250	1991 - 1995	19
Large-Scale National Grid Data	1:1,250	1994 - 1995	20
Historical Aerial Photography	1:2,500	1999	21

Historical Map - Segment A13



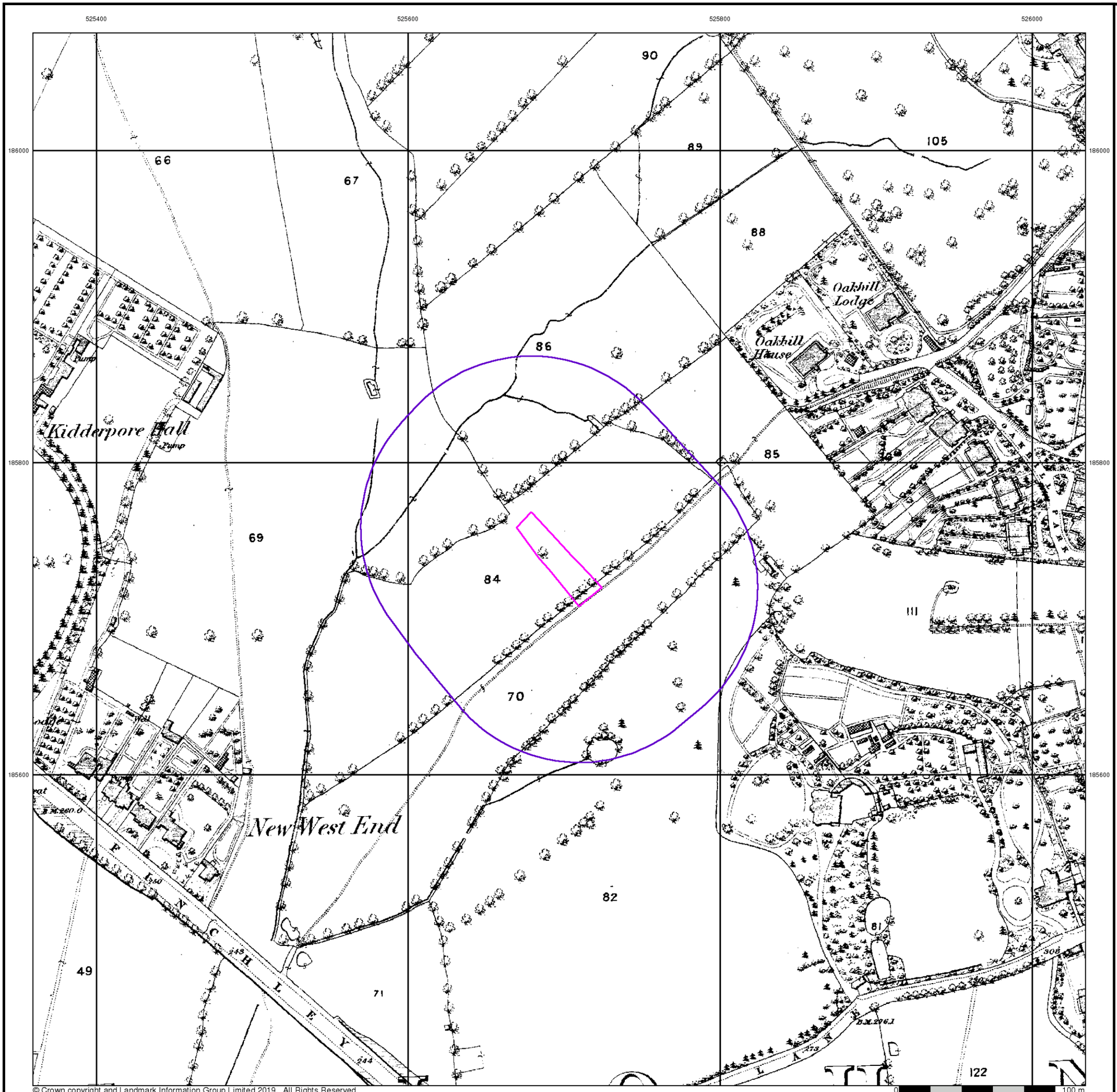
Order Details

Order Number: 225359419_1_1
Customer Ref: J19232
National Grid Reference: 525700, 185740
Slice: A
Site Area (Ha): 0.11
Search Buffer (m): 100

Site Details

8, Oakhill Avenue, LONDON, NW3 7RE

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



GEA

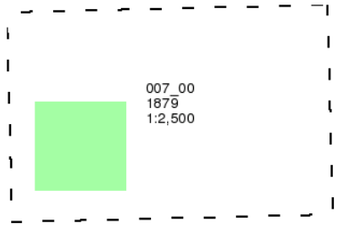
London

Published 1879

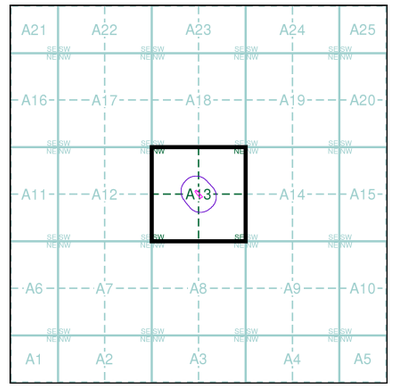
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



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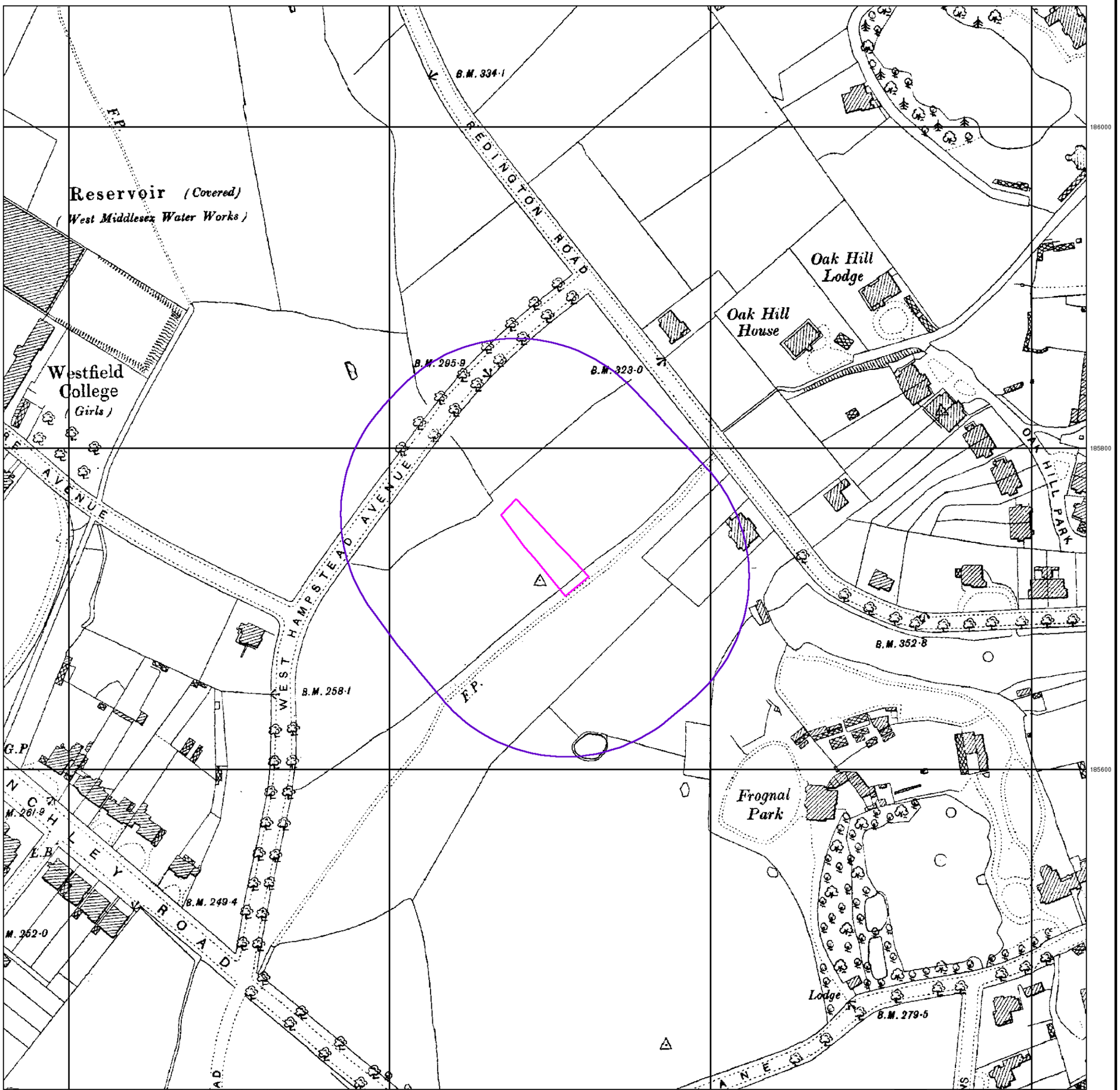


GEA

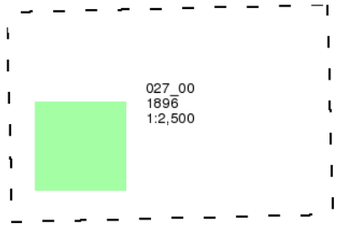
London

Published 1896

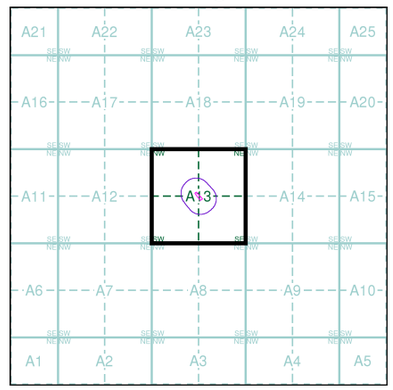
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	225359419_1_1
Customer Ref:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

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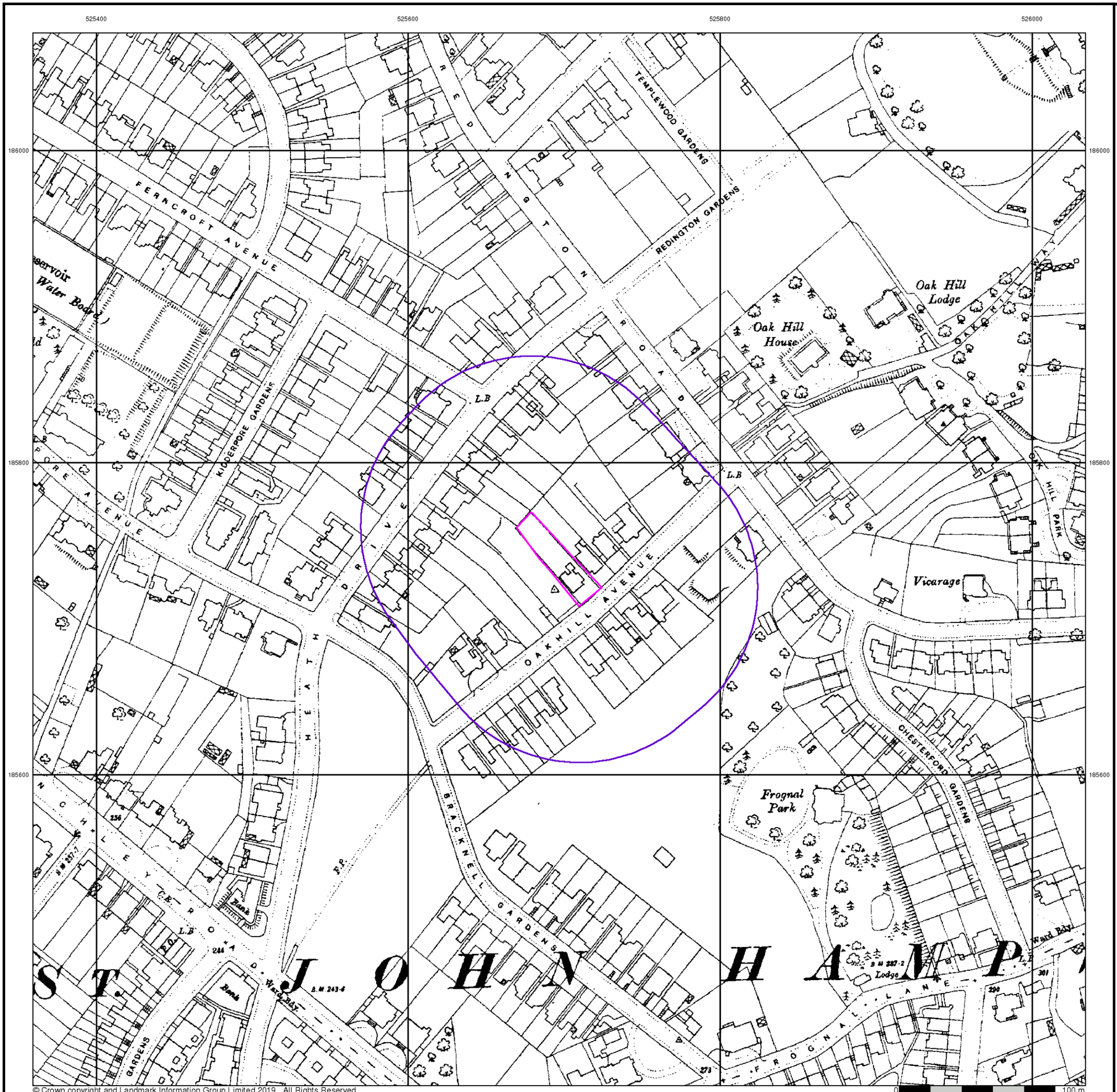


GEA

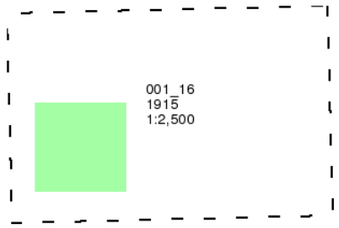
London

Published 1915

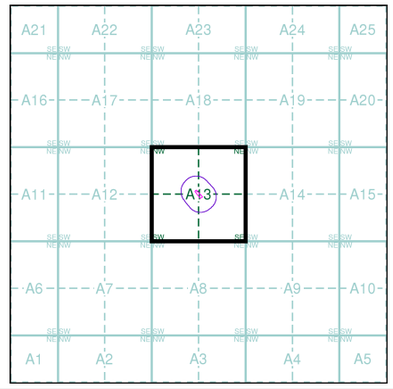
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	225359419_1_1
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National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

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GEA

London

Published 1934

Source map scale - 1:2,500

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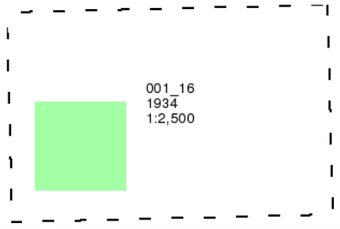
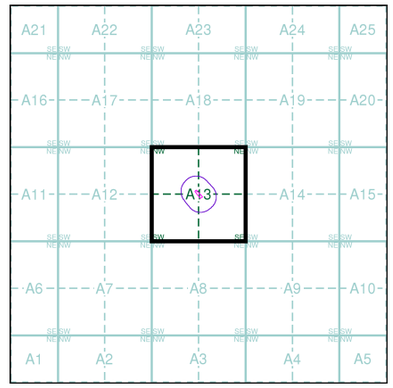
Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	225359419_1_1
Customer Ref:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

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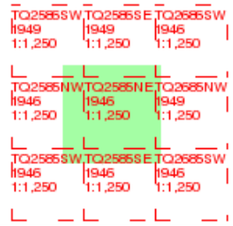
Historical Aerial Photography

Published 1946 - 1949

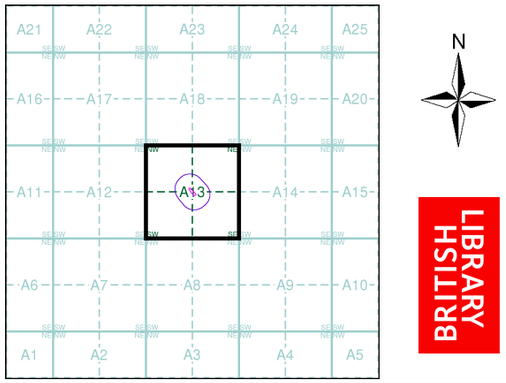
Source map scale - 1:1,250

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

Map Name(s) and Date(s)



Historical Aerial Photography - Segment A13



Order Details

Order Number:	225359419_1_1
Customer Ref:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
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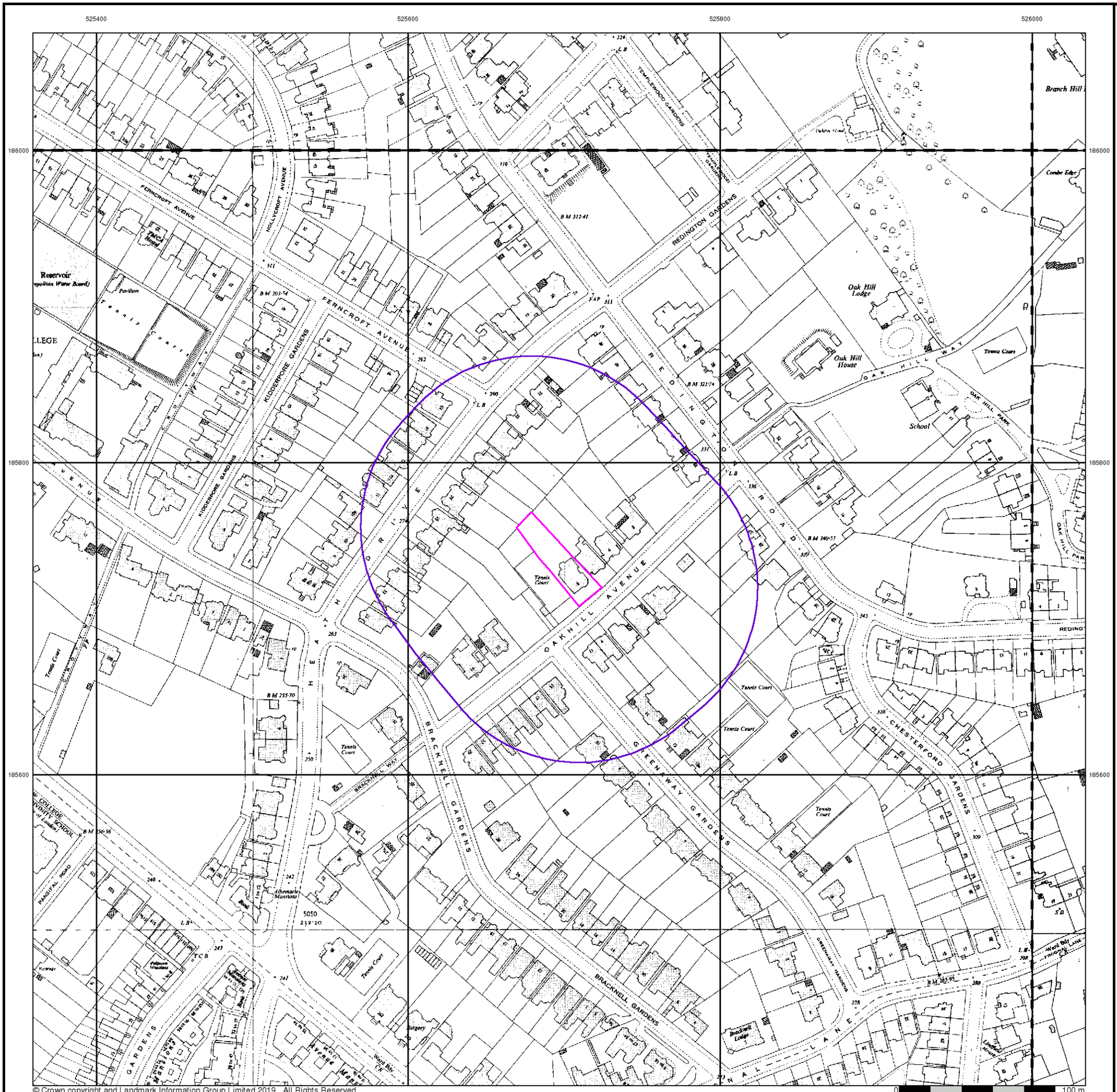


GEA

Ordnance Survey Plan

Published 1954 - 1955

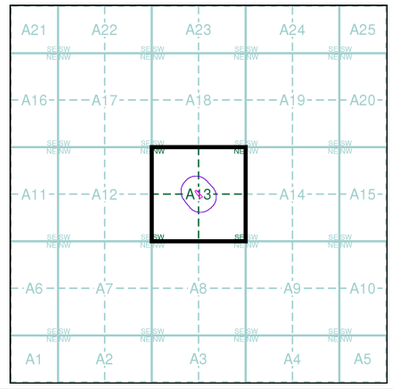
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

TQ2586 1955 1:2,500	TQ2686 1954 1:2,500
TQ2585 1955 1:2,500	TQ2685 1955 1:2,500

Historical Map - Segment A13



Order Details

Order Number:	225359419_1_1
Customer Ref:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

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GEA

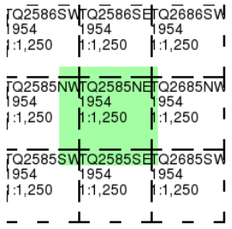
Ordnance Survey Plan

Published 1954

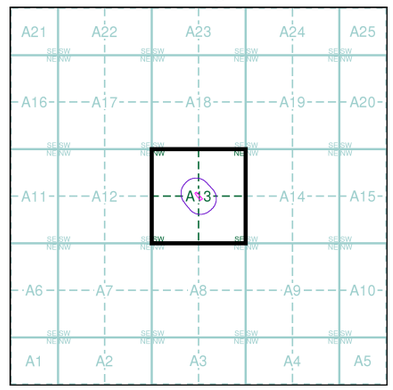
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	225359419_1_1
Customer Ref:	J19232
National Grid Reference:	525700, 185740
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

8, Oakhill Avenue, LONDON, NW3 7RE

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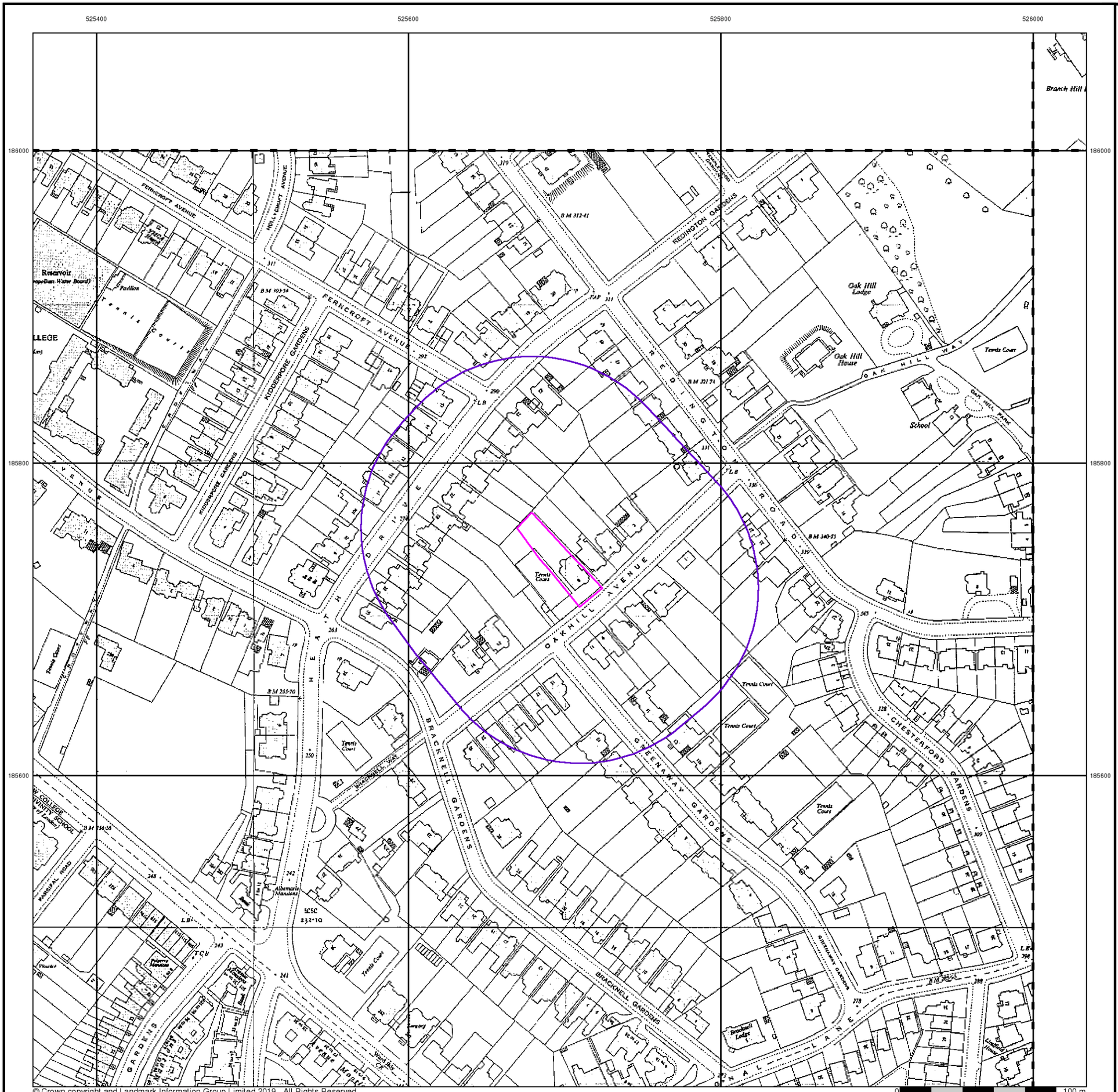


GEA

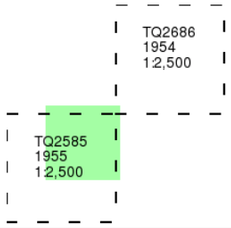
Additional SIMs

Published 1954 - 1955

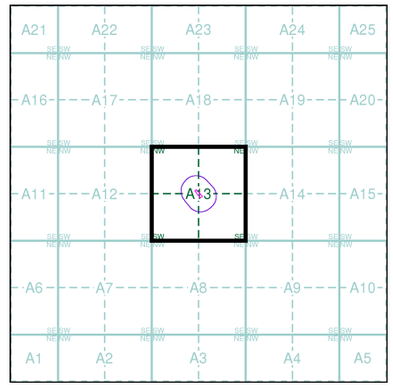
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	225359419_1_1
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Slice:	A
Site Area (Ha):	0.11
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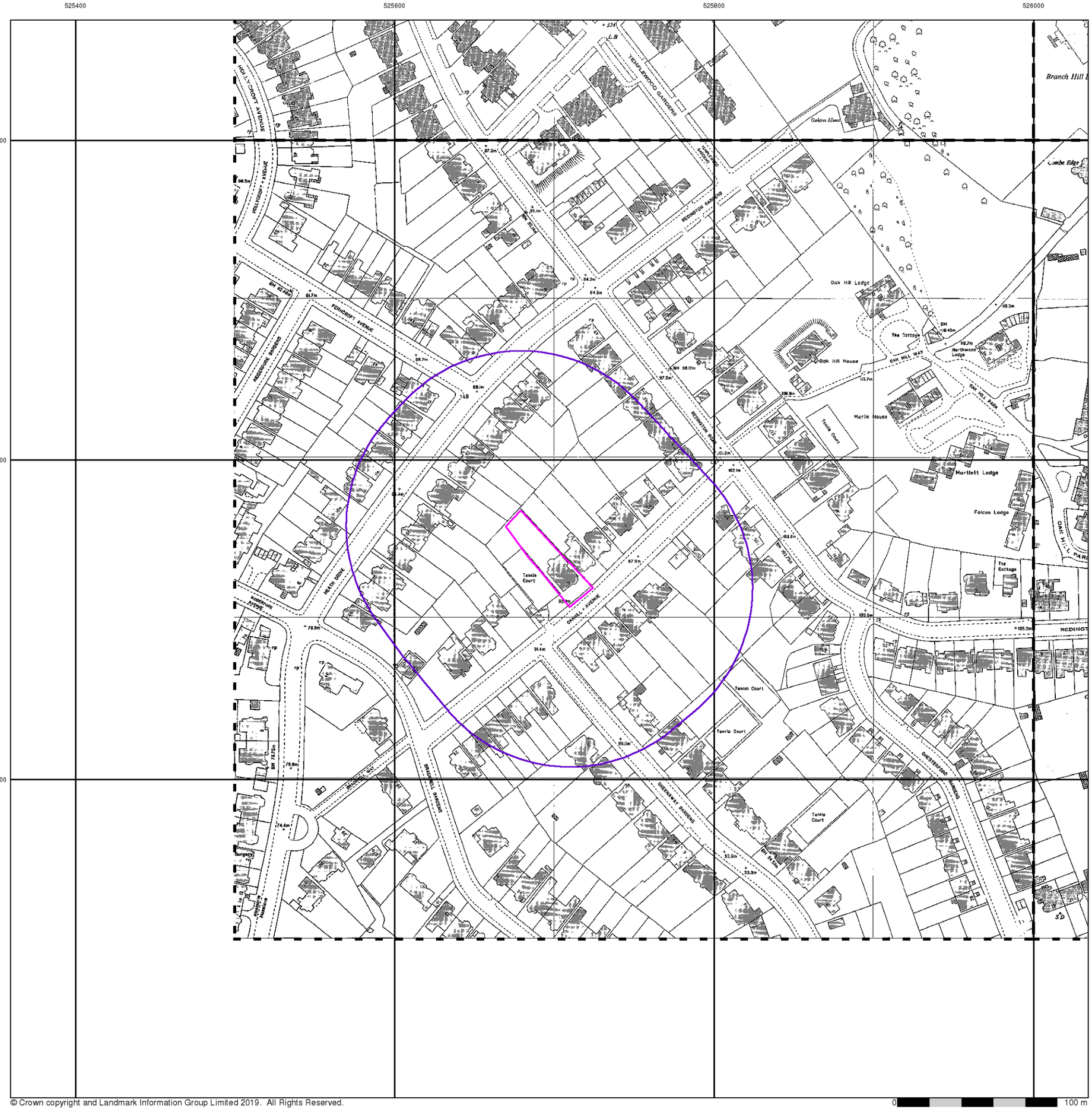


GEA

Additional SIMs

Published 1954 - 1966

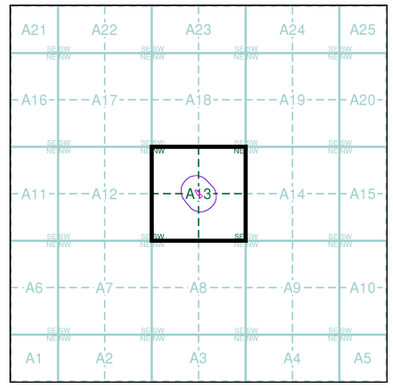
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

TQ2586SE 1954 1:1,250	TQ2686SW 1954 1:1,250
TQ2585NE 1966 1:1,250	TQ2685NW 1954 1:1,250

Historical Map - Segment A13



Order Details

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National Grid Reference:	525700, 185740
Slice:	A
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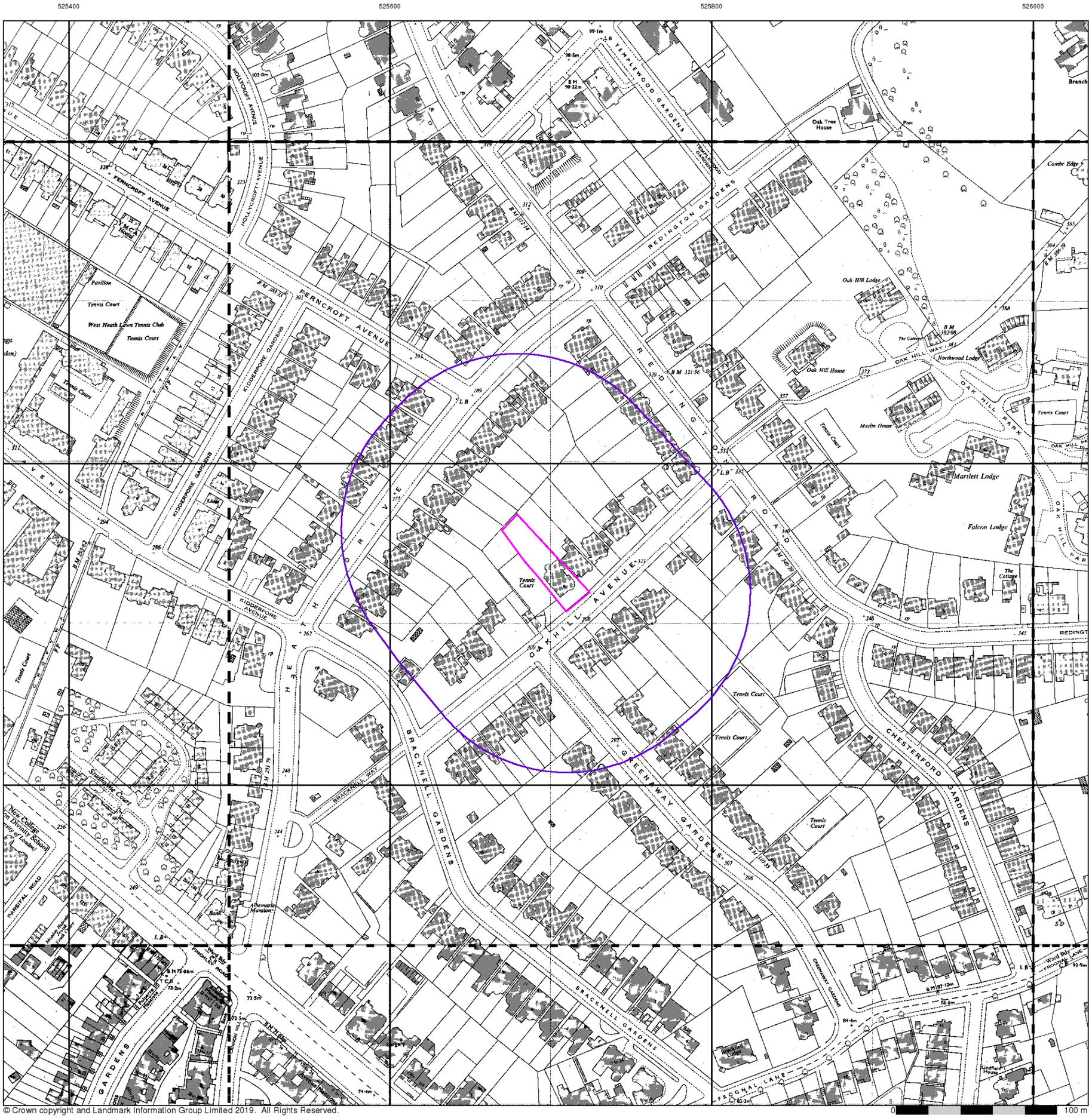

GEA

Ordnance Survey Plan

Published 1962 - 1973

Source map scale - 1:1,250

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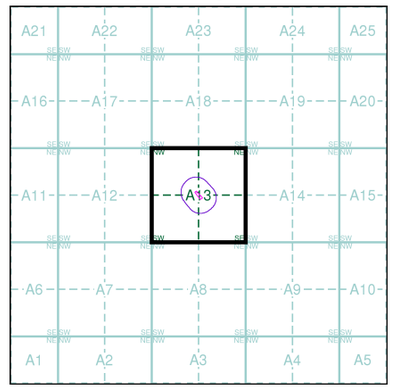
Map Name(s) and Date(s)

TQ2586SW 1965 1:1,250	TQ2586SE 1972 1:1,250	TQ2686SW 1973 1:1,250
TQ2585NW 1962 1:1,250	TQ2585NE 1966 1:1,250	TQ2685NW 1966 1:1,250
TQ2585SW 1973 1:1,250	TQ2585SE 1971 1:1,250	TQ2685SW 1970 1:1,250

Historical Map - Segment A13



Order Details

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