Tintagel Drive, Harrow	SUBADRA Environmental - Geotechnical - Laboratory - Foundations 13 Triangle Business Park, Stoke Mandeville, HP22 5BL Tel: 01296 739400 Email: consultants@subadra.com

PHASE ONE GEO-ENVIRONMENTAL DESK STUDY REPORT (PRELIMINARY RISK ASSESSMENT)



Report Prepared By:	Report Reviewed By:
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List of Attachments

Attachment One: Notice to Interested Parties
Attachment Two: Environmental Data Report and Historical Maps
Attachment Three: Geo-Hazards Report

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1 Introduction

1.1 The Purpose of This Assessment

The site is located off Tintagel Drive in Harrow and comprises a row of garage/lock-ups owned by London Borough of Harrow. We understand that London Borough of Harrow proposes to sell the site as part of the Greater London Authority small sites programme, which is a programme where small publicly-owned sites are brought forward for future redevelopment in the private sector.

In advance of selling the site, we have been commissioned by London Borough of Harrow to undertake a Phase One Geo-Environmental Report (also known as a Preliminary Risk Assessment).

The purpose of this assessment was to develop an initial conceptual site model of the site and establish whether or not there are potentially unacceptable risks to sensitive receptors from potential contaminants that may be present in the soil and/or groundwater under the site. We have not carried out any intrusive investigation of the site and have made no measurements of actual contamination levels that may be present.

Our assessment has been undertaken in accordance with the guidelines presented in the Environment Agency, 'Model Procedures for the Management of Land Contamination'[1]. and Environment Agency Guidance on Requirements for Land Contamination Reports[2].

As part of this assessment we have also undertaken a desk based review of how various geotechnical considerations may impact upon the proposed development scheme.

All the activities comprising this assessment were carried out in accordance with the procedures set out in our Quality Manual. Your attention is drawn to the Notice to Interested Parties included as Attachment One.

1.2 The Scope of This Assessment

Our assessment includes:

- A review of geological, hydrogeological and hydrological information to establish environmental sensitivities at the site and in its vicinity;
- A review of available historical information to determine the historical use of the site and its immediate surroundings;
- Compilation of a Conceptual Site Model and completion of a Qualitative Risk Assessment;
- A preliminary assessment of potential geotechnical engineering considerations;
- Preparation of a report, outlining findings and recommendations, including requirements for any further work;

The findings and opinions in this review are based upon information obtained from the sources outlined above. Information obtained from third parties has been accepted at face value however we do not guarantee its authenticity. Where practicable the information provided was confirmed from a secondary source such as the review of available municipal records.

As site comprises domestic lock-ups/garages, we have not completed a site inspection as part of this desk study review as we do not consider it would add to our conceptual understanding of potential contaminant sources.

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[1] DEFRA and Environment Agency (2004) "Model Procedures for the Management of Land Contamination" Report CLR 11 Environment Agency, Bristol.

[2] Environment Agency (2005) "Guidance on Requirements for Land Contamination Reports" Version 1.

1.3 Previous Reports Relating to the Site

We do not hold, and have not been provided with any, previous reports relating to the site.

1.4 Proposed Development Plans

Proposed Developments	We understand that London Borough of Harrow proposes to sell the site as part of the Greater London Authority small sites programme, which is a programme where small, publicly-owned sites are forward for future redevelopment in the private sector. At this stage we are not aware of the detailed scope of the proposed future redevelopment, although we understand the site will most likely be developed for residential end-use. We understand that this report is to be submitted in support of a planning application for the site's redevelopment. Whilst our assessment has not been compiled to directly satisfy any specific planning conditions the information contained in this report may assist in satisfying any such requirements. We note however that further works may be required.

Table One: Proposed Development Plans

2 Desk Study Information

2.1 Site Description, Location and Setting

Site Description	The site comprises a single row of garages/lock-up's along the site western boundary and a large paved area. The site slopes gently towards the south.		
Grid Reference	517943 192463	Location	The site is located in a suburb of Harrow, approximately 4.9km to the north west of Harrow town centre.
Elevation (approx)	~75m AOD		
Size (approx)	75ha		

Table Two: Site Location and Setting

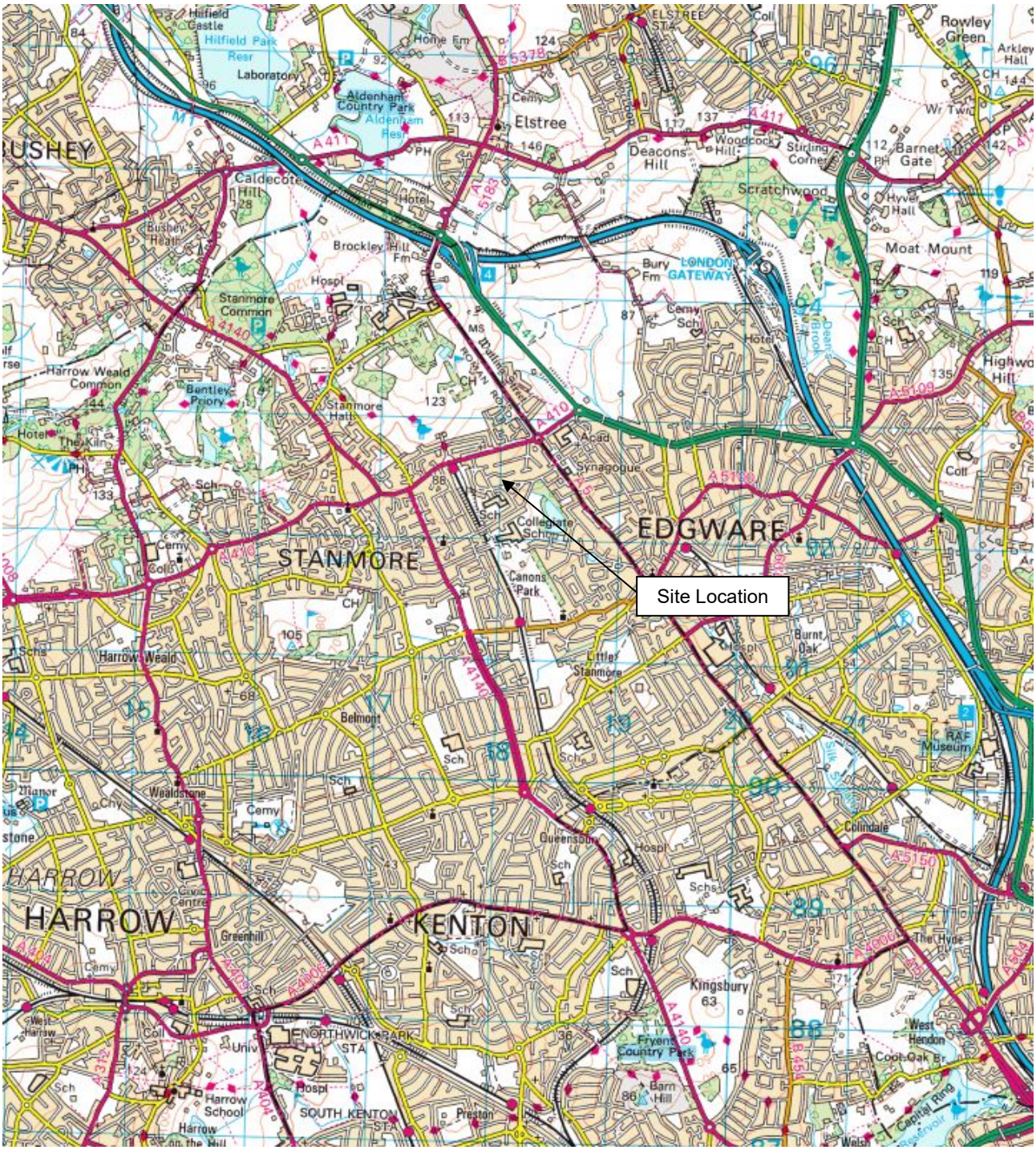


Figure One: Site Location Map

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Figure Two: Aerial Photograph Showing Site and Surrounding Area

Direction	Details
North	There are residential properties located within 5m of the northern site boundary.
East	There are residential properties located within 5m of the eastern site boundary.
South	There are residential properties located within 10m of the southern site boundary.
West	There are residential properties located within 15m of the southern site boundary.

Table Three: Surrounding Land Use

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2.2 Geology, Hydrogeology and Hydrology

	Geological Unit	Description	Estimated Thickness	Data Source
Drift Geology	None described at the site's locality			British Geological Survey (BGS)
Solid Geology	London Clay Formation	Blue-grey or grey-brown clay.	>20m	
	Lambeth Group	Clay, silt and sand.	>20m	
	Seaford Chalk Formation And Newhaven Chalk Formation (undifferentiated)	Chalk	>100m	
Nearby Borehole Records	The BGS hold records for a borehole constructed 350m to the north of the site (BGS ref. TQ19SE53/B). This records underlying geology to comprise initially soft to firm becoming stiff brown grey clay (London Clay Formation) to 10m depth.			

Table Four: Regional Geology

	Geological Unit	Environment Agency Aquifer Classification	Data Source
Drift Geology	None described at the site's locality		Environment Agency
Solid Geology	London Clay Formation	Unproductive Stratum	
	Lambeth Group	Secondary Aquifer (Class A)	
	Seaford Chalk Formation And Newhaven Chalk Formation	Principal Aquifer	
Nearby Borehole Records	The BGS borehole referenced above did not contain groundwater.		BGS

Table Five: Regional Hydrogeology

	Description	Distance	Direction	Data Source
Surface Water Features	Stream (flowing south easterly towards a lake - see below)	~300m	South East	Ordnance Survey
	Lake	~500m	South East	

Table Six: Regional Hydrology

Abstraction	Surface Water			Groundwater		
	Distance	Direction	Purpose	Distance	Direction	Purpose
Nearest	None within 1km of the site locality					
Source Protection Zone	The site does not lie within a designated Source Protection Zone					
Site located in an Environment Agency defined 'Drinking Water Safeguard Zone'	Surface Water	No				
	Groundwater	No				
Data sourced from Environment Agency						

Table Seven: Nearest Surface and Groundwater Abstractions

2.3 Site History

2.3.1 Historical Maps

Date	Review of Map – Description of Land Use at Site and in the Immediate Surrounding Area	Potentially Contaminative Land-use	
		On-site	Off-site
1865 / 1896 (1:2,500 Scale)	The site is unused and is located within 'Canons Park'. The area around the site is sparsely developed. There is a a lodge located 250m to the north west and a road located 200m to the north, orientated east to west.	None identified	None identified
1914 (1:2,500 Scale)	The site is unchanged. Canons Court (large property) is located 200m to the east. The land to the south of the site is described as a gold course but the full extents of the course it is not clear on the mapping .		
1935 (1:2,500 Scale) 1398 / 1951 (1:10,560 Scale)	The site is unchanged. There are residential properties located 200m to the north and north east, A train line is located 200m to the west (in a cutting).		
1962 (1:1,250 Scale)	The site has been developed into its current day layout as a row of garage/lock-up's along the western site boundary. Elsewhere there has been extensive residential development and the surround land contains residential properties in the present day layout.	Potential storage of oils/lubricants for domestic purposes, although risk posed by this activity is considered very low.	
Copies of representative historical maps are included as Attachment Two			

Table Eight: Historical Maps Review

2.3.2 Planning Records

Date	Application Number	Local Planning Authority – Planning Records (from local planning authority website)	Evidence of Development
Harrow Council's on-line planning portal contains no planning records for the site location.			

Table Nine: Summary of Online Planning Records

2.4 Additional Information

Flood Risk Zone	Flood Risk	Data Source
Zone 1	These are areas that are defined as having a low probability of flooding (land having a less than 1 in 1,000 annual probability of river or sea flooding). On this basis, and as the site is less than 1 hectare, a flood risk assessment is not likely to be required as part of future planning applications.	Environment Agency

Table Ten: Preliminary Flood Risk Assessment

Risk	Description	Data Source
Radon Risk	The site is located in an area where the National Radiological Protection Board have determined that <1% houses exceed the recommended Action Level for radon for existing homes in the UK of 200Bqm^{-3} (averaged over a year). No radon protective measures are necessary in the construction of new dwellings or extensions.	Public Health England
Nearest Landfill	The Environment Agency records show that there are no current or past landfill sites within 250m of the site.	Environment Agency
Degradable Material within Made Ground	Although the site has been developed, the garage/lock-ups are relatively small and we do not anticipate significant thickness of Made Ground to be associated with these structures.	Historic Mapping
Peat and Organic Matter within Alluvial Deposits	No viable source identified. No superficial deposits shown to be present beneath site or immediately surrounding area.	BGS
Degradation of Spilled or Leaked Petroleum Hydrocarbons	No viable source identified. Although there may have been potential storage of oils/lubricants for domestic purposes in the garage/lock-ups, we consider that this represents a very low risk of impacting underlying soils.	Historic Maps/ Ordnance Survey
Natural Deposits (e.g. Coal measure strata).	No viable source identified. Our geological review indicates surface geology comprises London Clay Formation, which is not considered a viable source of potentially hazardous ground-gas.	BGS

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Risk	Description	Data Source
Organic Rich Silt Formed in Water Bodies (e.g. Ponds, docks and rivers).	No viable linkage identified. Although there is a stream (located 350m to the south east) and Lake (located 500m to the south east), the presence of low permeability London Clay Formation, present from near surface, will inhibit lateral migration of potentially hazardous ground gases associated with these features.	Historic Mapping
Conclusions	We have not identified potentially viable hazardous ground gas sources and/or linkages associated with the site. The site is therefore unlikely to be at-risk of impact from concentrations of hazardous ground gases. As such we do not consider monitoring or assessment are required as part of any future investigation works and no special precautions are likely to be required to prevent landfill gas infiltration into the current building or future developments at the site.	

Table Eleven: Hazardous Ground Gas Risk

Risk	Description	Data Source
Risk of Coal Mining	The site is not located in an area considered to be at potential risk from coal mining.	Coal Authority
Records of Ground Workings and Non-Coal Mining	There are no records of underground working and/or non-coal mining activities within 250m of the site.There are records of cuttings ~190m to the south west, associated with a railway line and an unspecified pit 200m to the east.	Groundsure Report
Solution Feature Risk	The site's location has been classified as 'Negligible Hazard' for risks associated with ground dissolution of soluble rocks. This classification indicates the soluble rocks present at considerable depth beneath the site (Chalk is expected to be >40m depth) are not prone to dissolution at this location.	
Shrinking or Swelling Clay	The site's location has been classified as 'Moderate Hazard' for risks associated shrinking or swelling clays. We consider this classification is associated with the underlying London Clay Formation, which are likely to be predominantly comprised of high plasticity soils.	
Compressible Deposits	The site's location has been classified as 'Negligible Hazard' for risks associated with compressible deposits. We consider this classification is associated with the underlying London Clay Formation. This classification indicates compressible deposits such as layers of very soft clays and peats, which can compress if loaded by overlying structures, are unlikely to be present within the London Clay Formation at the site.	
Collapsible Deposits	The site's location has been classified as 'Very Low Hazard' for risks associated with collapsible deposits. We consider this classification is associated with the underlying London Clay Formation. This classification indicates deposits with potential to collapse when loaded and saturated are unlikely to be present within the London Clay Formation beneath the site.	

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Risk	Description	Data Source
Running Sands	The site's location has been classified as 'Very Low Hazard' for risks associated with running sand. We consider this classification is associated with the underlying London Clay Formation. This classification indicates there is a very low potential for running sand problems within the London Clay Formation beneath the site.	Groundsure Report
Landslides	The site's location has been classified as 'Very Low Hazard' for risks associated with landslides. We consider this classification is associated with the underlying London Clay Formation. This classification indicates slope instability problems within the London Clay Formation are unlikely to be present at the site.	

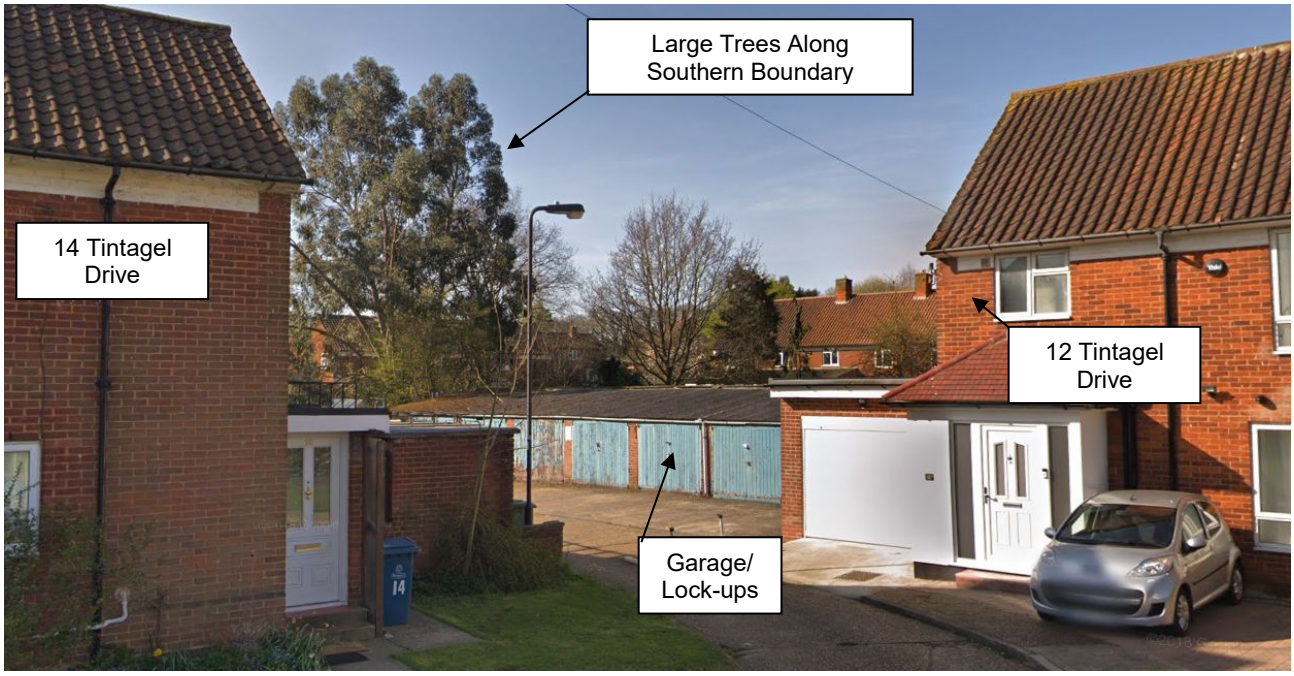
Table Twelve: Other Geological Hazards

3 Site Photographs

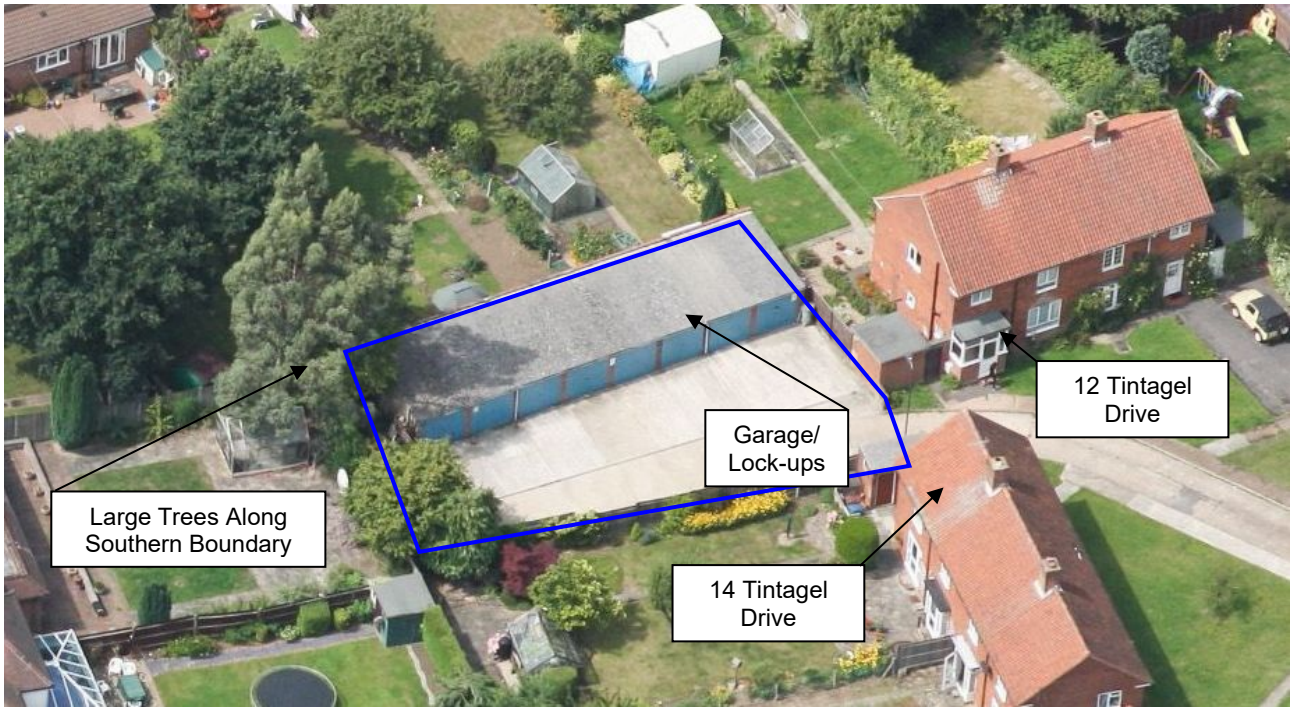
Although the scope of this desk study report does not include a site inspection, we have collated photographs of the site from on-line mapping services and provided these below.



Photograph One: Image of the Site in October 2009



Photograph Two: Overhead image of the site in April 2018



Photograph Three: Overhead image of the site in early 2020

Note: Images obtained from Google Streetview and Bing on-line mapping.

4 Preliminary Risk Assessment

4.1 Conceptual Site Model

We have used the information presented in the previous sections of this report to create an outline Conceptual Site Model for the site. We have reviewed potential contaminants and their receptors together with any possible pathways that may link them. The resulting pollutant linkages are summarised below.

Contaminant	Pathway	Receptor	Viable Pollutant Linkage
Our historic review indicates the site was unused prior to its use as domestic garages/lock-ups since the early 1960's. Although there may have been potential storage of oils/lubricants for domestic purposes in the garage/lock-ups, we consider this represents a very low risk, especially as the internal flooring is likely to be constructed from concrete which would act as a physical barrier from any surface spills.	Ingestion and dermal contact	Future residents	Unlikely - Risks from domestic garage/locks-ups considered very low as the internal flooring is likely to be constructed from concrete which would act as a physical barrier to underlying soils from any small surface spills.
	Permeation of volatile contaminants into drinking water supply service pipes		Unlikely - Risks from domestic garage/locks-ups considered very low as the internal flooring is likely to be constructed from concrete which would act as a physical barrier to underlying soils from any small surface spills.
	Volatilisation of hydrocarbons to indoor/outdoor air (either direct from soils or dissolved in groundwater)		Unlikely - Risks from domestic garage/locks-ups considered very low as the internal flooring is likely to be constructed from concrete which would act as a physical barrier to underlying soils from any low-level surface spills.
	Off-site migration of hydrocarbons: volatilisation to indoor/outdoor air (vapours from on-site soils or via lateral migration of dissolved compounds)	Neighbouring residents (<10m in all directions)	Unlikely - Risks from domestic garage/locks-ups considered very low as the internal flooring is likely to be constructed from concrete which would act as a physical barrier to underlying soils from any low-level surface spills.
	Downward migration of contaminants to groundwater.	London Clay Formation (unproductive Aquifer)	No - No viable receptor identified.
	Off-site migration of contaminants dissolved in groundwater leading to direct impact of environmental receptors.	Stream (300m South East)	No - No viable pathway identified.

Table Thirteen: Conceptual Site Model

5 Conclusions and Recommendations

5.1 Environmental Conclusions

Site Details	The site comprises a plot of domestic garages/lock-ups since the early 1960s, owned by London Borough of Harrow. We understand that London Borough of Harrow proposes to sell the site as part of the Greater London Authority small sites programme, which is a programme where small publicly-owned sites are brought forward for future redevelopment in the private sector. At this stage we are not aware of the detailed scope of the proposed future redevelopment, although we understand the site will most likely be developed for residential end use.
Review of Environmental Site Sensitivity	The site is located in an area of low environmental sensitivity. Geology maps indicate underlying geology comprises London Clay Formation which typically comprises stiff grey to grey blue clay. The Environment Agency classify this geological unit as an Unproductive Aquifer and is therefore unlikely to contain significant qualities of groundwater. The nearest surface water feature is a stream located 300m east.
Review of Site History and Potential Contaminant Sources	Our historic review indicates the site was unused prior to its use as domestic garages/lock-ups since the early 1960's. Although there may have been potential storage of oils/lubricants for domestic purposes in the garage/lock-ups, we consider this represents a very low risk, especially as the internal flooring is likely to be constructed from concrete which would act as a physical barrier to underlying soils from any small surface spills.
Conclusions	Based on the results of our desk-top review, we have not identified any significant source of contamination We do not consider any environmental investigation and/or risk assessment is required as part of the proposed development scheme at this time.

Table Fourteen: Environmental Conclusions

5.2 Geotechnical Considerations

Anticipated Geology and Hydrogeology	Geology maps indicate underlying geology comprises London Clay Formation which typically comprises stiff grey to grey blue clay. The Environment Agency classify this geological unit as an Unproductive Aquifer and is therefore unlikely to contain significant qualities of groundwater. An intrusive geotechnical investigation would be required to confirm the nature of the geology beneath the site, and allow an assessment of the soil strength profile and engineering properties, to assist with the design of appropriate foundations and highlight potential development constraints.
Existing Foundations	We consider it likely the existing garage/lock-up's have mass concrete foundations, possibly with simple mesh reinforcement (although this would need to be verified on site).

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Trees	The photographs taken of the site show the presence of a number of mature trees along/near to the southern site boundary. Given the soils beneath the site are likely to be of high plasticity, the presence of the tree is likely to impact on the design of foundations for the development. Minimum foundation depths will need to be calculated in accordance with NHBC methodology; this will require the scope of future geotechnical investigation to include collection of soil plasticity data.
Use of Soakaways	The London Clay Formation is likely to comprise cohesive soils of low permeability. In this instance, the use of soakaways is unlikely to be suitable to receive surface water run-off from the site buildings.
Areas of Made Ground and/or Soft Ground	Should Made Ground and/or soft regions of clay, be encountered we recommend they be replaced with suitably compacted inert granular fill material in the vicinity of proposed foundations to ensure a suitable bearing capacity for its intended purpose.
Temporary Support Measures	Based on our geological review, shallow excavations for foundation installations are likely to be formed within clay which is likely to remain stable for short periods without support or being battered back. An assessment of side wall stability will need to be undertaken on site, once ground conditions have been established.
Waste Classification	Soil excavated from the site from excavations for foundation installations are likely to be classified as inert or non-hazardous for waste disposal purposes, although confirmatory analysis may be required by the receiving landfill. Any soil excavated from the site requiring disposal should only be sent to an appropriately licensed waste management/disposal facility using an appropriately licensed waste carrier.
Unexploded Ordnance	The site is classified by Zetica interactive mapping as being located in an area of Greater London with low to moderate bombing density. We understand that our client has commissioned a third-party a preliminary unexploded ordnanace risk assessment for the site.
Presence of Unrecorded Buried Obstructions	Prior to the construction of the existing garage/lock-up's the site was undeveloped. The risk of encountering unrecorded buried obstructions is considered low.
Excavations and Ground Water	The London Clay Formation's classification as an Unproductive Aquifer and is therefore unlikely to contain significant qualities of groundwater. Please note, however, following periods of heavy rain, surface water may pond in open excavations and appropriate allowance should be made for this.
Services	A below ground utility survey should be completed as part of pre-enabling works, to assist with determining how buried utilities may impact upon the proposed redevelopment.
Geotechnical Categorisation:	Eurocode 7 introduced a system of three geotechnical categories (Geotechnical Category One, Two, Three) as described below. Geotechnical Category One: Defined as a category that should only include small and relatively simple structures for which it is possible to ensure that the fundamental requirements will be satisfied on the basis of experience and qualitative geotechnical investigations with negligible risk.

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Geotechnical Categorisation:	Geotechnical Category Two: Defined as a category that relates to conventional types of structures and foundations with no exceptional risk or difficult soil or loading conditions. The fundamental requirements are satisfied using quantitative geotechnical data and analysis by a qualified person with appropriate geotechnical experience and knowledge. Geotechnical Category Three: Defined as a category that contains structures that can be very large and unusual, exceptionally or unusually difficult structures or ground conditions in highly seismic area. The design of structures of this category requires an experienced geotechnical specialist like a geotechnical engineer. Some examples of this category are very large buildings, large bridges, tunnels in highly or soft permeable ground, embankments on soft ground and deep excavations. We have not been provided sufficient information about the scope of the proposed redevelopment in order to fully define its geotechnical category, however we consider it likely to the development will be defined as either Category One or Two. The geotechnical category should be reassessed throughout the design progresses.

Table Fifteen: Geotechnical Considerations

5.3 Recommendations

We make the following recommendations relating to the proposed development:

Geotechnical investigation	We have identified several geotechnical risk factors and uncertainties associated with the site. We therefore recommend that a geotechnical site investigation is completed in order to provide information regarding soil properties and ground conditions. As part of the geotechnical investigation, we recommend limited environmental testing of soils and groundwater be completed to confirm that no contamination is present under the site and assist in any waste disposal of soils excavated during foundation construction. Additionally, we could undertake some preliminary permeability testing to verify infiltration rates of shallow soils to confirm if the use of soakaways are suitable for the site.
Establishing of Tree Species	We recommend that the species of any trees present at or near to the site be established, and geotechnical laboratory testing of shallow soils be completed, and specialist advice sought to confirm how/if the trees will influenced foundation design.
Pollution Watching Brief	As with any site, we recommend that a watching brief be maintained by the contractors carrying out demolition and construction activities. If any areas of contamination (or suspected contamination) are observed, we recommend that we should be contacted to complete verification of the underlying soils to ensure no potential risks could be posed to future site users.
Pre-demolition Asbestos	We recommend an asbestos survey of the garage/lock-up's be undertaken prior to demolition in order to determine whether asbestos containing materials are present and, if so, to determine a suitable remedial strategy for their removal. We recommend that surveying and any removal/remediation is completed by a specialist contractor.
Regulator Consultation	We recommend that this report is forwarded to the relevant statutory consultees including the Environment Agency and Local Authority to seek their comments and subsequent approval.
Your attention is drawn to the Notice to Interested Parties included as Attachment One.	

Table Sixteen: Recommendations

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ATTACHMENT ONE:
NOTICE TO INTERESTED PARTIES

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NOTICE TO INTERESTED PARTIES

The purpose of our work is to provide general information on the environmental and/or geotechnical conditions existing at the site and related to soil and/or groundwater. The Client or others specified the scope of the investigation and the validity of our conclusions is limited by the scope of work specified. We are not responsible for any such limitations or omissions.

Where stated in this report, we have used information supplied by third parties. While we have evaluated as far as possible the validity of this information, we cannot guarantee its accuracy in any way whatsoever.

No investigation technique is capable of completely identifying all of the contaminants that might be present in the soil or groundwater under a site. Where specified in our report, we have examined the ground by constructing a number of boreholes and/or trial pits. We recovered samples of soil and/or groundwater from available exposures.

The depth and spacing of our Sampling locations were selected to ensure with a reasonable probability that they would be representative of the actual conditions across the whole site. However, safety considerations relating to existing site infrastructure may have restricted our ability to investigate all potential contaminant sources. Specifically, we were unable to investigate the soil and groundwater condition immediately adjacent to the underground structures and/or buried services. These limitations must be borne in mind when considering the conclusions reached in this report.

Soil is intrinsically variable and the spread of contaminants within the soil is therefore subject to a degree of non-uniformity. For these reasons no sampling technique can completely eliminate the possibility of obtaining samples that are not representative of the actual conditions. Our sampling techniques are intended to reduce the possibility to an acceptable level, within the limits imposed by the scope of the investigation.

Groundwater levels and soil vapour levels that we report were accurate at the time of the investigation. Groundwater and soil vapour levels are variable. Long term monitoring may be required to ensure that the levels recorded during our investigation are representative of long term and possible ‘worst case’ conditions. In accepting our recommendations and/or conclusions the Client acknowledges that further, more detailed investigation would allow a more accurate assessment of site conditions to be made and that this would reduce any consequential risk to the Client.

Our investigation was carried out to assess the significance of contamination resulting from use of the site as identified in this report. Unless we have indicated otherwise, no assessment of the potential impact of any other previous uses has been made. No investigation was carried out to determine whether or not any deleterious or hazardous materials (such as asbestos) have been used in the construction of the buildings present on the site. Unless otherwise stated no investigation or assessment has been made of the presence or otherwise of invasive plant species including but not limited to Japanese Knotweed.

Unless specifically stated otherwise, we have not assessed the effect of any proposed future construction activities on existing structures on or near to the site. Nor, unless stated otherwise, have we assessed the likely effect of trees on existing or proposed structures on or near the site.

We do not accept any responsibility for the cost of remedial works or other costs incurred in whatever way whatsoever as a result of any omissions, errors or other shortcomings in this report unless we have been given reasonable opportunity to verify ourselves that such faults exist and we have been given a reasonable opportunity to carry out works to remedy such faults ourselves using the most practicable means available to us. We do not accept liability for any consequential losses incurred by you while either we or others carry out any remedial works we deem necessary.

This report has been prepared for the Client, as specified on the cover page of this report. In accepting our recommendations and/or conclusions the Client accepts that the terms of our appointment were as detailed in the Proposal, or Proposals, that we provided to the Client before being appointed and that these terms supersede any other terms and/or conditions set out in any contracts agreed between ourselves and the Client, regardless of when such terms and/or conditions were agreed to by us and/or signed by us.

Use of, and reliance on, this report by other third parties will be at such third parties own risk, and we do not accept any liability or responsibility to them.

Neither the whole nor any part of this report, or any reference to it, may be included in any published document circular or statement or published in any way without our prior written approval.

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ATTACHMENT TWO:
ENVIRONMENTAL DATA REPORT AND HISTORICAL MAPS

Envirocheck®
LANDMARK INFORMATION GROUP®

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
239089219_1_1

Customer Reference:
LA20005

National Grid Reference:
517940, 192460

Slice:
A

Site Area (Ha):
0.04

Search Buffer (m):
1000

Site Details:

12, Tintagel Drive
STANMORE
HA7 4SR

Client Details:

Mr S Partridge
Subadra Consulting Ltd
Unit 13 Triangle Business Park
Wendover
Bucks
HP22 5BL

Envirocheck®
LANDMARK INFORMATION GROUP®

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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.

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Radon Potential dataset Copyright Notice

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility					n/a
Contaminated Land Register Entries and Notices					
Discharge Consents					
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			1	4
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature				Yes	
Pollution Incidents to Controlled Waters	pg 1			5	2
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 3				1
Water Abstractions	pg 3				(*1)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 3	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 3	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 3			4	22

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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)	pg 7				1
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 8				1
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 9	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites					
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 9	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 9	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 9	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 9	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

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 10		2	12	26
Fuel Station Entries	pg 13				1
Gas Pipelines					
Underground Electrical Cables	pg 13			2	2
Sensitive Land Use					
Ancient Woodland	pg 14				1
Areas of Adopted Green Belt	pg 14			2	
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 14			1	
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
1	**Local Authority Pollution Prevention and Controls** Name: Master Dry Cleaners Location: 8 Canons Corner, Edgware, Middlesex, HA8 8AE Authority: London Borough of Harrow, Environmental Health Services Permit Reference: EPA/PPC/Permit/65 Dated: 13th August 2007 Process Type: Local Authority Air Pollution Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	435	2	518259 192773
2	**Local Authority Pollution Prevention and Controls** Name: Canons Corner Service StationTesco Stores Ltd Location: 156 Stonegrove, LONDON, HA8 8AF Authority: London Borough of Barnet, Environmental Health Department Permit Reference: PPC36 Dated: 13th January 1999 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station **Status: Permitted** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	510	3	518328 192809
3	**Local Authority Pollution Prevention and Controls** Name: Mister Dry Cleaners Location: 74 The Broadway, Stanmore, Middlesex, HA7 4DU Authority: London Borough of Harrow, Environmental Health Services Permit Reference: PPC/Permit/66 Dated: 12th May 2009 Process Type: Local Authority Air Pollution Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12SW (W)	755	2	517181 192378
4	**Local Authority Pollution Prevention and Controls** Name: Swift Dry Cleaners Location: 20 The Broadway, Stanmore, Middlesex, HA7 4DW Authority: London Borough of Harrow, Environmental Health Services Permit Reference: EPA/PPC/Permit/82 Dated: 17th September 2007 Process Type: Local Authority Air Pollution Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12SW (W)	877	2	517062 192346
5	**Local Authority Pollution Prevention and Controls** Name: Global Dry Cleaners Location: 7 Church Road, Stanmore Authority: London Borough of Harrow, Environmental Health Services Permit Reference: EPA/PPC/Permit/57 Dated: 24th July 2007 Process Type: Local Authority Air Pollution Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12SW (W)	983	2	516958 192323
	Nearest Surface Water Feature	A13SE (E)	306	-	518244 192365
6	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Seven Acres Lake Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: 28th June 1989 Incident Reference: N1890359 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	292	4	518200 192300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Canons Park, EDGWARE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: 30th August 1992 Incident Reference: NE920468 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14SW (E)	352	4	518300 192400
8	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: EDGWARE Authority: Environment Agency, Thames Region Pollutant: Unknown Sewage Note: Confirmed As A Pollution Incident Incident Date: 1st April 1992 Incident Reference: N1920185 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14NW (E)	377	4	518300 192600
9	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Glendale Avenue Authority: Environment Agency, Thames Region Pollutant: Miscellaneous - Unknown Note: Confirmed As A Pollution Incident Incident Date: Not Supplied Incident Reference: N1890331 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	421	4	518300 192700
10	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Lake View, EDGWARE Authority: Environment Agency, Thames Region Pollutant: Storm Sewage Note: Not Supplied Incident Date: 8th April 1997 Incident Reference: THN11997031988 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SW (E)	474	4	518400 192300
11	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: 7 Acre Lake, CANONS PARK Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: 21st August 1991 Incident Reference: N1910462 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SW (E)	551	4	518500 192400
12	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Edgeware, CANONS PARK Authority: Environment Agency, Thames Region Pollutant: Unknown Sewage Note: Not Supplied Incident Date: 23rd April 1996 Incident Reference: N1960207 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	571	4	518400 192100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	**Substantiated Pollution Incident Register** Authority: Environment Agency - Thames Region, North East Area Incident Date: 2nd October 2014 Incident Reference: 1283227 Water Impact: Category 4 - No Impact Air Impact: Category 2 - Significant Incident Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Atmospheric Pollutants and EffectsOther Odour	A19SE (NE)	870	4	518653 192979
	Water Abstractions Operator: Mr Knott Licence Number: Th/039/0038/009 Permit Version: 1 Location: Stanmore Golf Club Borehole Authority: Environment Agency, Thames Region Abstraction: Golf Courses: 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: Not Supplied Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 17th June 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6SE (SW)	1460	4	516875 191451
	Groundwater Vulnerability Map Combined Classification: Unproductive Aquifer (may have productive aquifer beneath) Combined Vulnerability: Unproductive Combined Aquifer: Unproductive 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	A13NE (NE)	0	5	517942 192461
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A13NE (NE)	0	5	517942 192461
	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				
14	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 127.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (E)	306	6	518245 192366

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SW (E)	432	6	518365 192326
16	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 66.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SW (E)	432	6	518365 192326
17	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 317.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: The Lake Catchment Name: Thames Primacy: 1	A14SW (E)	435	6	518367 192325
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8NE (SE)	557	6	518174 191943
19	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8NE (SE)	557	6	518191 191951
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 41.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SW (SE)	668	6	518549 192155
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 16.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9NW (SE)	676	6	518536 192113
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9NW (SE)	685	6	518550 192119
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 33.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9NW (SE)	692	6	518552 192109

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 267.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9NW (SE)	726	6	518584 192097
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 423.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NW (W)	861	6	517117 192747
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1060.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NW (W)	876	6	517090 192713
27	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 14.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	913	6	518230 193340
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 112.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	913	6	518230 193340
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 127.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	917	6	518244 193339
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	921	6	518403 193271
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 34.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	924	6	517848 193391
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 59.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	933	6	518367 193304

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 44.0 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	944	6	518424 193286
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 66.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	955	6	518466 193273
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 102.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8SW (S)	965	6	517757 191501
36	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 56.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9NE (SE)	972	6	518733 191875
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 57.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	979	6	518526 193260
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 93.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8SW (S)	985	6	517717 191489
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 261.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9NE (SE)	996	6	518725 191825

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	**Historical Landfill Sites** Licence Holder: Stanmore Dairies Ltd Location: Wood Lane, Stanmore, Middx Name: Wood Farm, Stanmore Operator Location: Otterspool Way, Watford, Watford By Pass, Herts Boundary Accuracy: As Supplied Provider Reference: EAHLD35557 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Not Supplied EA Waste Ref: 80064 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: Not Supplied	A17SE (NW)	861	4	517365 193115
41	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Wood Farm Licence Number: 80064 Location: Stanmore Dairies Ltd, Wood Farm, Wood Lane, Stanmore, Middx, HA7 4LJ Licence Holder: Stanmore Dairies Ltd Authority: Environment Agency - Thames Region, North East Area Site Category: Landfills Taking Other Wastes (Construction, Demolition, Dredgings) Max Input Rate: Not Supplied **Licence Status: Inactive** Issued: 17th February 1986 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A17SE (NW)	863	4	517362 193115
	Local Authority Landfill Coverage Name: London Borough of Harrow - Has supplied landfill data		0	2	517942 192461
	Local Authority Landfill Coverage Name: London Borough of Barnet - Has supplied landfill data		482	7	518331 192762

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	**Control of Major Accident Hazards Sites (COMAH)** Name: National Grid Gas Plc Location: Stanmore Holder Station, Marsh Lane,Stanmore, Middlesex, Ha7 2SH Reference: Not Supplied Type: Lower Tier **Status: Active** Positional Accuracy: Manually positioned to the address or location	A8SW (S)	974	8	517689 191508

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Thames Group	A13NE (NE)	0	1	517942 192461
	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	A13NE (NE)	0	1	517942 192461
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	517942 192461
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	517942 192461
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	517942 192461
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	517942 192461
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	517942 192461
	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	A13NE (NE)	0	1	517942 192461
	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	A13NE (NE)	0	1	517942 192461

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	**Contemporary Trade Directory Entries** Name: Vanbroc Ltd Location: 3, Tintagel Drive, Stanmore, HA7 4SR Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	62	-	517892 192515
44	**Contemporary Trade Directory Entries** Name: Unipools Ltd Location: 33, Snaresbrook Drive, Stanmore, Middlesex, HA7 4QN Classification: Swimming Pool Contractors, Repairers & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (N)	119	-	517989 192582
45	**Contemporary Trade Directory Entries** Name: Datasharp Location: 3, Snaresbrook Drive, Stanmore, Middlesex, HA7 4QN Classification: Telecommunications Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	255	-	518147 192629
46	**Contemporary Trade Directory Entries** Name: The Twin Potters Invitation Board Co Location: 48, Dalkeith Grove, Stanmore, Middlesex, HA7 4SF Classification: Soft Furnishings - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (S)	281	-	518052 192191
47	**Contemporary Trade Directory Entries** Name: Mortimer Box Co Ltd Location: 60, Dalkeith Grove, Stanmore, Middlesex, HA7 4SF Classification: Packaging & Wrapping Equipment & Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (S)	299	-	517991 192153
48	**Contemporary Trade Directory Entries** Name: D N M Trading Co Ltd Location: 95, Merrion Avenue, Stanmore, Middlesex, HA7 4RY Classification: Leather Merchants & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SW (SW)	342	-	517685 192222
49	**Contemporary Trade Directory Entries** Name: Nu-Life Upholstery Repairs Ltd Location: Zero, Court Drive, Stanmore, Middlesex, HA7 4QH Classification: Antiques - Repairing & Restoring **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	370	-	518224 192716
50	**Contemporary Trade Directory Entries** Name: N V Boutique Location: Facebookcom Nvboutiquelondon,London Road, Stanmore, Middlesex, HA7 4PD Classification: Jewellery Manufacturers & Repairers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	371	-	517574 192569
51	**Contemporary Trade Directory Entries** Name: Revamp & Restyle Location: 23, Kerry Court, Stanmore, Middlesex, HA7 4NR Classification: Blinds, Awnings & Canopies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	391	-	517594 192665
52	**Contemporary Trade Directory Entries** Name: Master Dry Cleaners Location: 8, Canons Corner, Edgware, Middlesex, HA8 8AE Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	437	-	518261 192774
52	**Contemporary Trade Directory Entries** Name: Master Dry Cleaners Location: 8, Canons Corner, Edgware, HA8 8AE Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	437	-	518261 192774

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
52	**Contemporary Trade Directory Entries** Name: Executive Location: A, 8, Canons Corner, Edgware, Middlesex, HA8 8AE Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	437	-	518261 192774
53	**Contemporary Trade Directory Entries** Name: Lyon Enterprises Location: 25, Jesmond Way, Stanmore, Middlesex, HA7 4QR Classification: Boilers - Servicing, Replacements & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	461	-	518410 192403
54	**Contemporary Trade Directory Entries** Name: Europtronic Location: 5, Kerry Avenue, Stanmore, HA7 4NJ Classification: Electronic Component Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	488	-	517502 192700
55	**Contemporary Trade Directory Entries** Name: Canons Corner Service Station Location: 156, Stonegrove, Edgware, Middlesex, HA8 8AF Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	510	-	518328 192809
55	**Contemporary Trade Directory Entries** Name: Tesco Express Location: 154, Stonegrove, Edgware, Middlesex, HA8 8AF Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	510	-	518328 192809
55	**Contemporary Trade Directory Entries** Name: Tesco Petrol Station Location: 154 Stonegrove, Edgware, Middlesex, HA8 8AF Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	521	-	518360 192788
55	**Contemporary Trade Directory Entries** Name: Esso Location: Stonegrove, Edgware, Middlesex, HA8 8AF Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	522	-	518337 192816
55	**Contemporary Trade Directory Entries** Name: Esso Location: 156, Stonegrove, Edgware, Middlesex, HA8 8AF Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	538	-	518353 192824
56	**Contemporary Trade Directory Entries** Name: O J M Location: 28, Sandymount Avenue, Stanmore, Middlesex, HA7 4TY Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	519	-	517429 192333
57	**Contemporary Trade Directory Entries** Name: I Control Hospitality Ltd Location: 121, Stonegrove, Edgware, Middlesex, HA8 7TJ Classification: Cash Register Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	526	-	518474 192518
58	**Contemporary Trade Directory Entries** Name: Specialist Professional Cleaning Ltd Location: Flat 4, Wakeman House, Stonegrove, Edgware, Middlesex, HA8 8AN Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	570	-	518475 192685
59	**Contemporary Trade Directory Entries** Name: 3 C Ltd Location: 22, Merryfield Gardens, Stanmore, Middlesex, HA7 4TG Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	591	-	517481 192077

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
60	**Contemporary Trade Directory Entries** Name: V A Silverstone & Co Location: 20 Dene Gardens, Stanmore, Middlesex, HA7 4TA Classification: Commercial Vehicle Dealers **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A12SE (W)	596	-	517370 192266
61	**Contemporary Trade Directory Entries** Name: Mr Dryclean Location: 74, The Broadway, Stanmore, Middlesex, HA7 4DU Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (W)	755	-	517181 192377
62	**Contemporary Trade Directory Entries** Name: Cleaners Of Stanmore Location: 55, The Broadway, Stanmore, Middlesex, HA7 4DJ Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	781	-	517162 192329
63	**Contemporary Trade Directory Entries** Name: Touch Wood Jewels Location: 67, Howberry Road, Edgware, Middlesex, HA8 6TB Classification: Jewellery Manufacturers & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	800	-	517875 191651
64	**Contemporary Trade Directory Entries** Name: Swift Dry Cleaners Location: 20, The Broadway, Stanmore, Middlesex, HA7 4DW Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (W)	875	-	517064 192348
64	**Contemporary Trade Directory Entries** Name: Pixels 2 Pictures Location: 14, The Broadway, Stanmore, Middlesex, HA7 4DW Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	893	-	517046 192346
65	**Contemporary Trade Directory Entries** Name: Atko Services Ltd Location: 51, Howberry Road, Edgware, Middlesex, HA8 6SX Classification: Air Conditioning Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	879	-	517916 191570
66	**Contemporary Trade Directory Entries** Name: Metropolis Location: 22, Lake View, Edgware, Middlesex, HA8 7RU Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	906	-	518756 192037
67	**Contemporary Trade Directory Entries** Name: Shellshock Designs Location: 38, Canons Drive, Edgware, Middlesex, HA8 7QT Classification: Tile Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	923	-	518694 191905
68	**Contemporary Trade Directory Entries** Name: Brian Dicke Location: Buckingham House East, Buckingham Parade, The Broadway, Stanmore, Middlesex, HA7 4EB Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12SW (W)	942	-	516992 192387
69	**Contemporary Trade Directory Entries** Name: Aaronson Veneers Location: 56, Dennis Lane, Stanmore, HA7 4JW Classification: Veneer Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	947	-	517024 192739

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	**Contemporary Trade Directory Entries** Name: Potenza Media Ltd Location: Flat 5, Stanmore Towers, Church Road, Stanmore, Middlesex, HA7 4DE Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	961	-	516986 192294
70	**Contemporary Trade Directory Entries** Name: Global Dry Cleaners Location: 7, Church Road, Stanmore, Middlesex, HA7 4AR Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (W)	987	-	516954 192326
70	**Contemporary Trade Directory Entries** Name: Zagora N W L Ltd Location: Stanmore House 28a, Church Road, Stanmore, HA7 4AW Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (W)	989	-	516959 192284
70	**Contemporary Trade Directory Entries** Name: Cleanforce Location: Stanmore House, 28a, Church Road, Stanmore, Middlesex, HA7 4AW Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (W)	993	-	516955 192283
70	**Contemporary Trade Directory Entries** Name: London Boys Scrap Yards In Stanmore Location: Stanmore House, 28a, Church Road, Stanmore, Middlesex, HA7 4AW Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	993	-	516955 192283
71	**Contemporary Trade Directory Entries** Name: Benetec Location: 1, Lake View, Edgware, Middlesex, HA8 7RT Classification: Cutting Tools & Machinery **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	968	-	518766 191931
72	**Fuel Station Entries** Name: Edgware Express Location: 156, Stonegrove Spur Road, , Edgware, Outer London, HA8 8AF Brand: ESSO Premises Type: Petrol Station **Status: Open** Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	538	-	518353 192824
73	**Underground Electrical Cables** Unique Feature Identifier: 10008569 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 30th October 2017	A14NW (NE)	466	9	518350 192703
74	**Underground Electrical Cables** Unique Feature Identifier: 10008103 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 2nd May 2018	A14NW (NE)	467	9	518351 192704
75	**Underground Electrical Cables** Unique Feature Identifier: 10008563 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 30th October 2017	A18SE (NE)	535	9	518255 192908
76	**Underground Electrical Cables** Unique Feature Identifier: 10008562 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 30th October 2017	A14SE (E)	889	9	518790 192156

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	**Ancient Woodland** Name: Not Supplied Reference: 1495656 Area(m²): 23100.97 Type: Ancient and Semi-Natural Woodland	A18SW (N)	710	10	517674 193130
78	**Areas of Adopted Green Belt** Authority: London Borough of Harrow Plan Name: Proposal Map **Status: Adopted** Plan Date: 4th July 2013	A18SW (N)	415	11	517909 192886
79	**Areas of Adopted Green Belt** Authority: London Borough of Barnet Plan Name: London Borough Of Barnet Unitary Development Plan **Status: Adopted** Plan Date: 31st May 2006	A19SW (NE)	491	12	518280 192831
80	**Local Nature Reserves** Name: Stanmore Country Park Multiple Area: N Area (m2): 307303.33 Source: Natural England Designation Date: 1st January 1995	A18SW (N)	461	10	517803 192912

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
London Borough of Barnet - Environmental Health Department	January 2015	Annual Rolling Update
Three Rivers District Council - Environmental Health Department	January 2015	Annual Rolling Update
London Borough of Harrow - Environmental Health Services	October 2014	Annual Rolling Update
Hertsmere Borough Council - Environmental Health Department	September 2014	Annual Rolling Update
London Borough of Brent - Environmental Health Department	September 2014	Annual Rolling Update
Discharge Consents		
Environment Agency - Thames Region	January 2020	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	January 2020	Quarterly
Environment Agency - Thames Region	January 2020	Quarterly
Local Authority Integrated Pollution Prevention And Control		
London Borough of Barnet - Environmental Health Department	April 2013	Variable
London Borough of Harrow - Environmental Health Services	December 2014	Variable
Three Rivers District Council - Environmental Health Department	February 2015	Variable
Hertsmere Borough Council - Environmental Health Department	January 2015	Variable
London Borough of Brent - Environmental Health Department	March 2016	Variable
Local Authority Pollution Prevention and Controls		
London Borough of Barnet - Environmental Health Department	December 2014	Annual Rolling Update
London Borough of Harrow - Environmental Health Services	December 2014	Annual Rolling Update
Three Rivers District Council - Environmental Health Department	February 2015	Annual Rolling Update
Hertsmere Borough Council - Environmental Health Department	January 2015	Annual Rolling Update
London Borough of Brent - Environmental Health Department	March 2016	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
London Borough of Barnet - Environmental Health Department	December 2014	Variable
London Borough of Harrow - Environmental Health Services	December 2014	Variable
Three Rivers District Council - Environmental Health Department	February 2015	Variable
Hertsmere Borough Council - Environmental Health Department	January 2015	Variable
London Borough of Brent - Environmental Health Department	March 2016	Variable
Nearest Surface Water Feature		
Ordnance Survey	January 2020	
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	January 2020	Quarterly
Environment Agency - Thames Region - North East Area	January 2020	Quarterly

Data Currency

Agency & Hydrological	Version	Update Cycle
Water Abstractions Environment Agency - Thames Region	January 2020	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	November 2019	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	November 2019	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	November 2019	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	November 2019	Quarterly
Flood Defences Environment Agency - Head Office	November 2019	Quarterly
OS Water Network Lines Ordnance Survey	January 2020	Quarterly
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	November 2019	Quarterly
Environment Agency - Thames Region - North East Area	November 2019	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South East Region - North East Thames Area	January 2020	Quarterly
Environment Agency - Thames Region - North East Area	January 2020	Quarterly
Local Authority Landfill Coverage		
Hertfordshire County Council - Spatial Planning and Economy Unit	May 2000	Not Applicable
Hertsmere Borough Council - Environmental Health Department	May 2000	Not Applicable
London Borough of Barnet	May 2000	Not Applicable
London Borough of Brent - Environmental Health Department	May 2000	Not Applicable
London Borough of Harrow - Environmental Health Services	May 2000	Not Applicable
Three Rivers District Council - Environmental Health Department	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Hertfordshire County Council - Spatial Planning and Economy Unit	May 2000	Not Applicable
Hertsmere Borough Council - Environmental Health Department	May 2000	Not Applicable
London Borough of Barnet	May 2000	Not Applicable
London Borough of Brent - Environmental Health Department	May 2000	Not Applicable
London Borough of Harrow - Environmental Health Services	May 2000	Not Applicable
Three Rivers District Council - Environmental Health Department	May 2000	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 Harrow	April 2015	Variable
Hertfordshire County Council - Spatial Planning and Economy Unit	February 2016	Variable
Hertsmere Borough Council - Planning Department	February 2016	Variable
London Borough of Barnet	February 2016	Variable
Three Rivers District Council	February 2016	Variable
London Borough of Brent	January 2016	Variable
Planning Hazardous Substance Consents		
London Borough of Harrow	April 2015	Variable
Hertfordshire County Council - Spatial Planning and Economy Unit	February 2016	Variable
Hertsmere Borough Council - Planning Department	February 2016	Variable
London Borough of Barnet	February 2016	Variable
Three Rivers District Council	February 2016	Variable
London Borough of Brent	January 2016	Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	October 2019	Bi-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	January 2020	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	December 2019	Quarterly
Gas Pipelines		
National Grid	July 2014	
Underground Electrical Cables		
National Grid	October 2019	
Sensitive Land Use	**Version**	**Update Cycle**
Ancient Woodland		
Natural England	August 2018	Bi-Annually
Areas of Adopted Green Belt		
Hertsmere Borough Council - Planning Department	February 2020	As notified
London Borough of Barnet	February 2020	As notified
London Borough of Brent	February 2020	As notified
London Borough of Harrow	February 2020	As notified
Three Rivers District Council	February 2020	As notified
Areas of Unadopted Green Belt		
Hertsmere Borough Council - Planning Department	February 2020	As notified
London Borough of Barnet	February 2020	As notified
London Borough of Brent	February 2020	As notified
London Borough of Harrow	February 2020	As notified
Three Rivers District Council	February 2020	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		
Environment Agency - Head Office	December 2017	Bi-Annually
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	

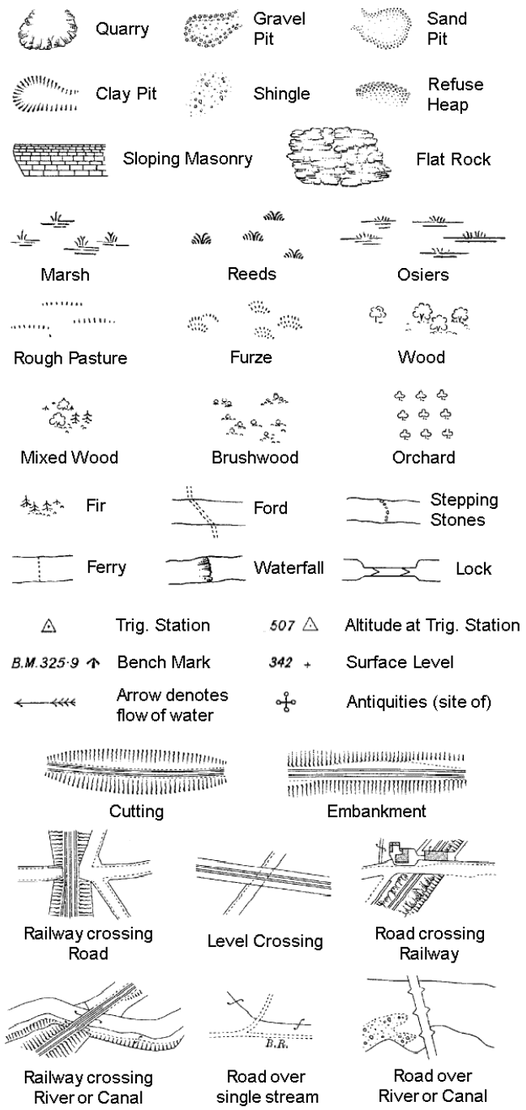
Useful Contacts

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	**London Borough of Harrow - Environmental Health Services** P O Box 18, Civic Centre, Harrow, Middlesex, HA1 2UT	Telephone: 020 8863 5611 Fax: 020 8863 8267 Website: www.harrow.gov.uk
3	**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
4	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.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 Barnet - Land Charges** The Town Hall, The Burroughs, Hendon, LONDON, NW4 4BQ	Telephone: 0208 3592482 Fax: 0208 3592493 Website: www.barnet.gov.uk
8	**Health and Safety Executive** 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
9	**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
10	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
11	**London Borough of Harrow** Civic Centre, Station Road, Harrow, Middlesex, HA1 2XF	Telephone: 020 8863 5611 Fax: 020 8863 8267 Website: www.harrow.gov.uk
12	**London Borough of Barnet** Barnet House, 1255 High Road, Whetstone, London, N20 0EJ	Telephone: 020 8359 4000 Fax: 020 8359 4616 Website: www.barnet.gov.uk
13	**Hertsmere Borough Council - Planning Department** Civic Offices, Elstree Way, Borehamwood, Hertfordshire, WD6 1WA	Telephone: 020 8207 2277 Fax: 020 8207 7444 Website: www.hertsmere.gov.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.

Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

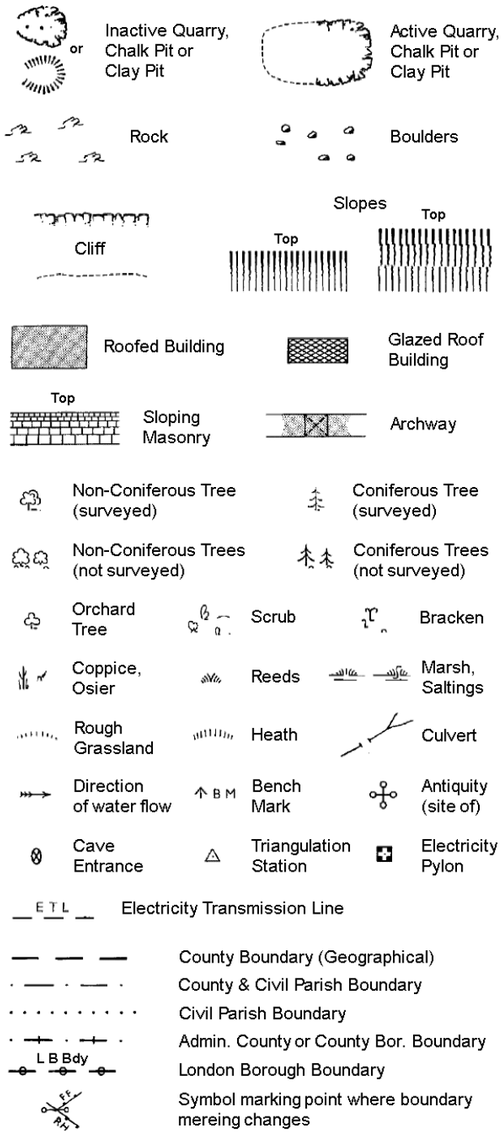
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

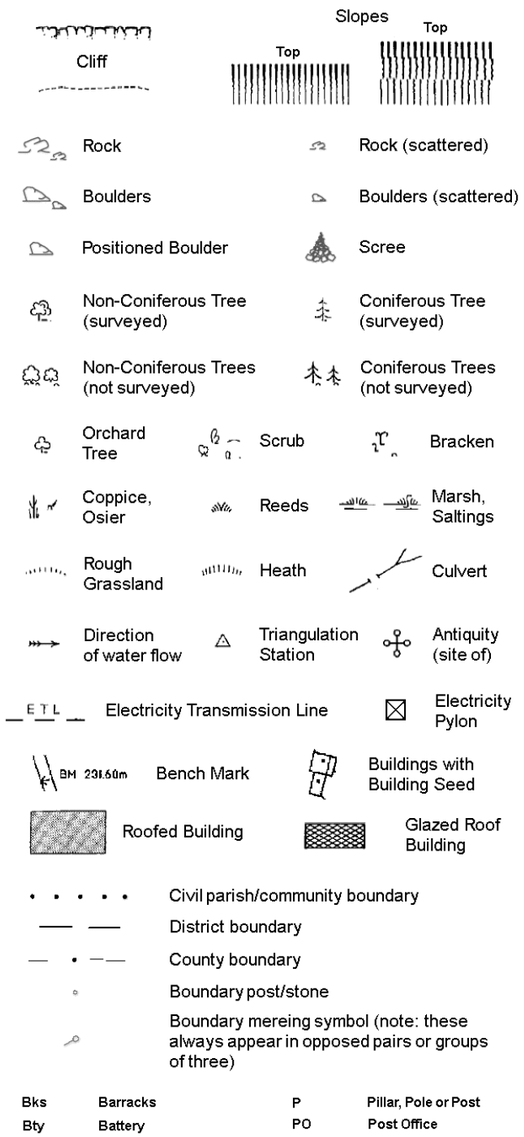
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

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

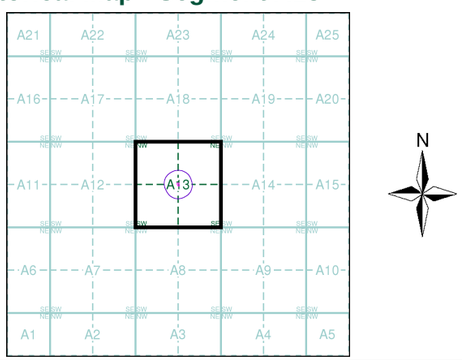
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Middlesex	1:2,500	1865 - 1874	2
Middlesex	1:2,500	1896	3
Middlesex	1:2,500	1914	4
Middlesex	1:2,500	1935	5
Ordnance Survey Plan	1:1,250	1962 - 1963	6
Ordnance Survey Plan	1:2,500	1963 - 1964	7
Additional SIMs	1:1,250	1963 - 1984	8
Additional SIMs	1:2,500	1963 - 1964	9
Additional SIMs	1:1,250	1979	10
Large-Scale National Grid Data	1:1,250	1991	11

Historical Map - Segment A13



Order Details

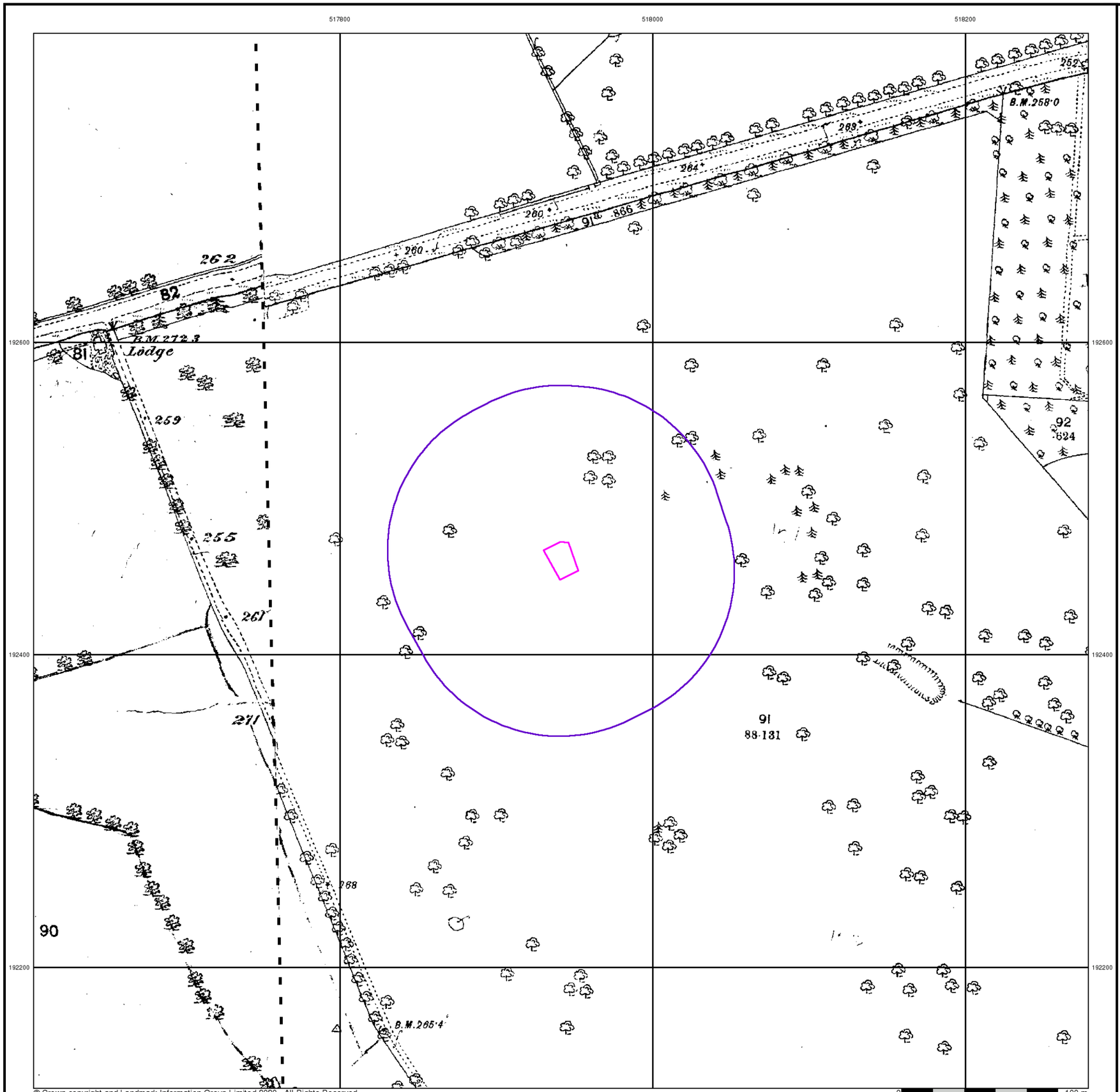
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Customer Ref: LA20005
National Grid Reference: 517940, 192460
Slice: A
Site Area (Ha): 0.04
Search Buffer (m): 100

Site Details

12, Tintagel Drive, STANMORE, HA7 4SR

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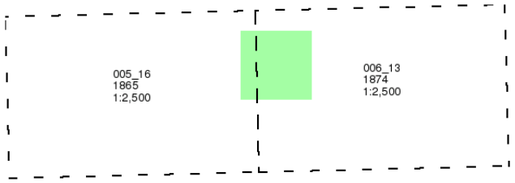
Middlesex

Published 1865 - 1874

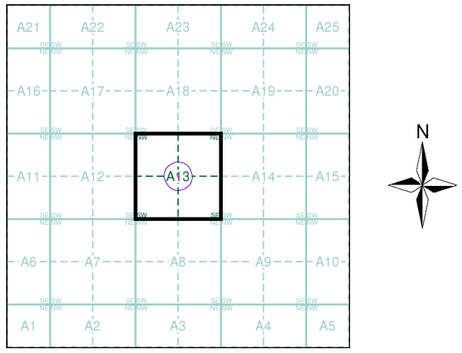
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

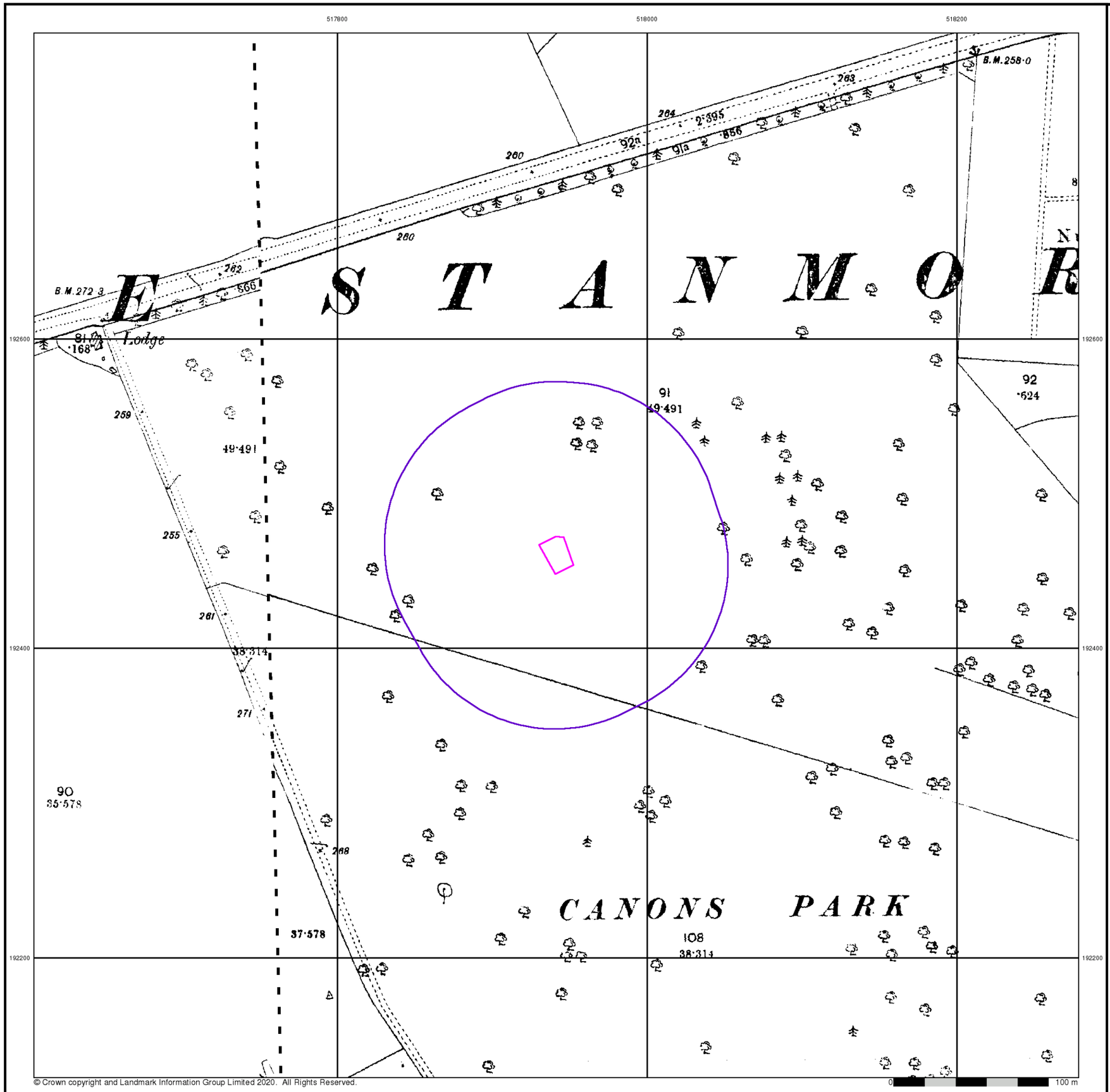
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Customer Ref:	LA20005
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Slice:	A
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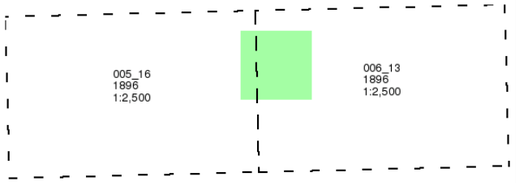
Middlesex

Published 1896

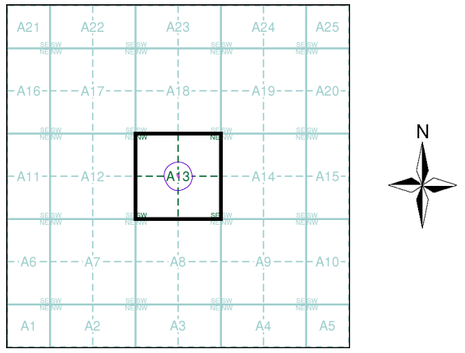
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

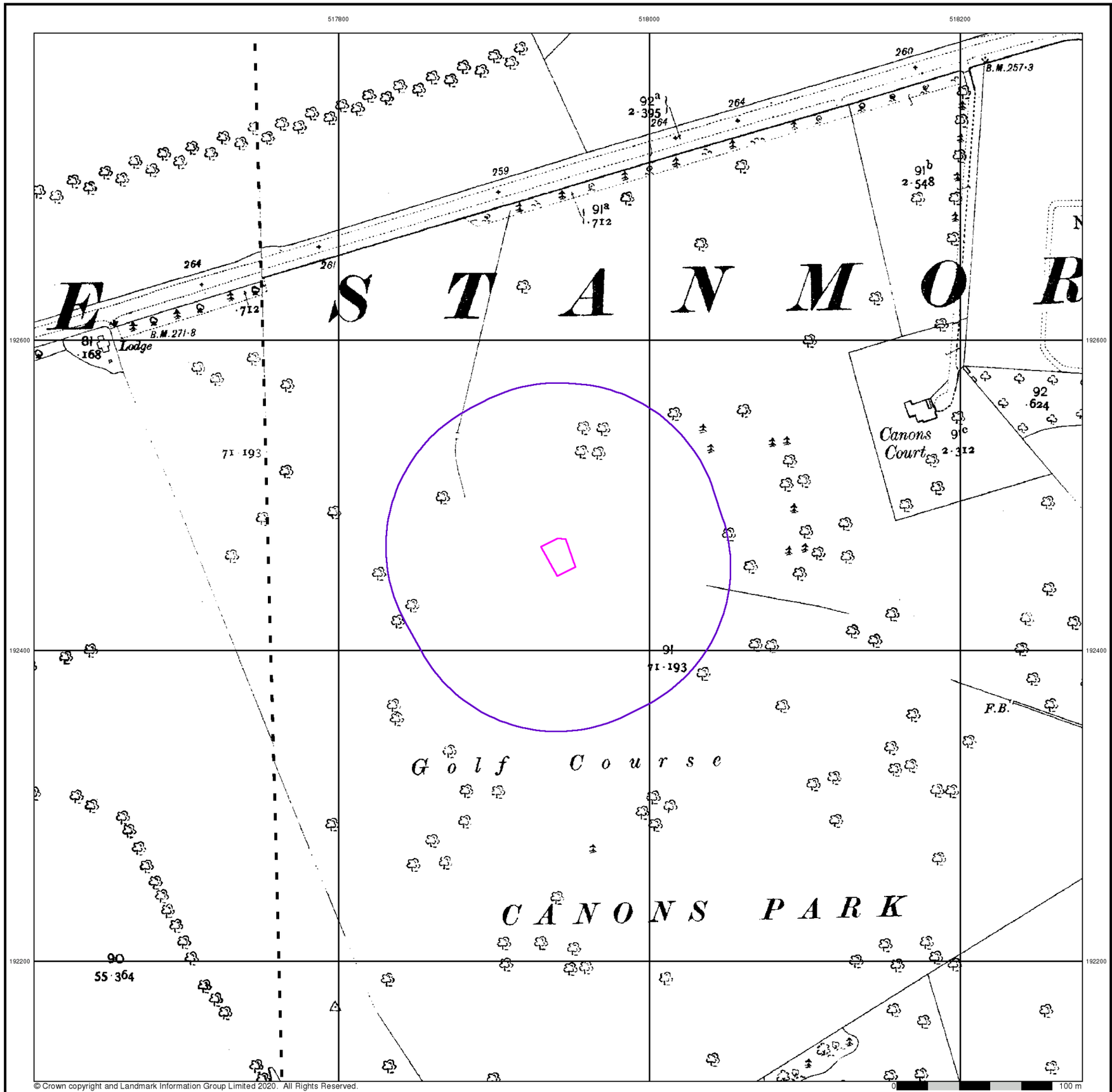
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Customer Ref:	LA20005
National Grid Reference:	517940, 192460
Slice:	A
Site Area (Ha):	0.04
Search Buffer (m):	100

Site Details

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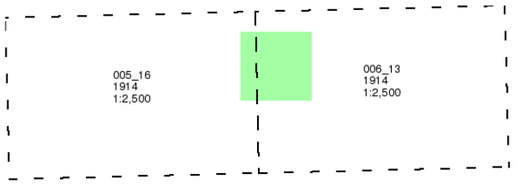
Middlesex

Published 1914

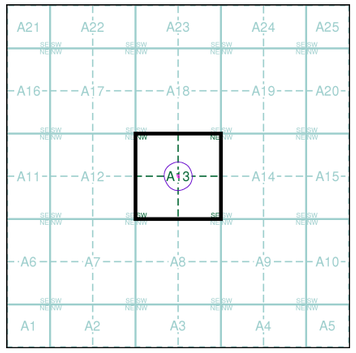
Source map scale - 1:2,500

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



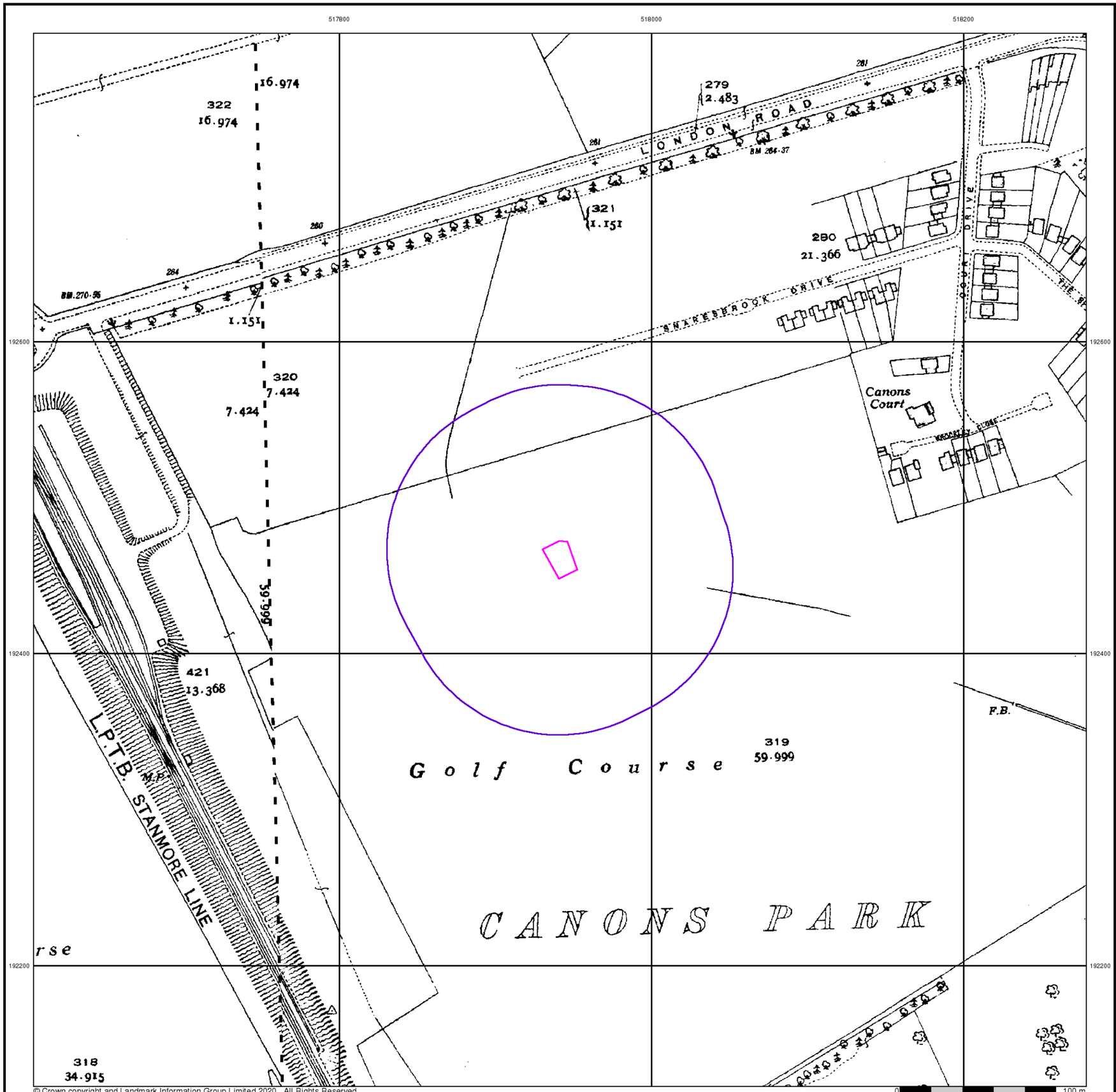
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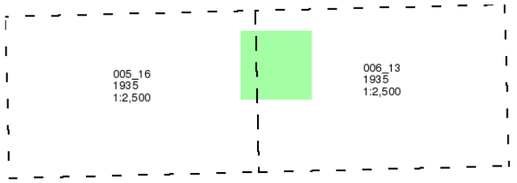
Middlesex

Published 1935

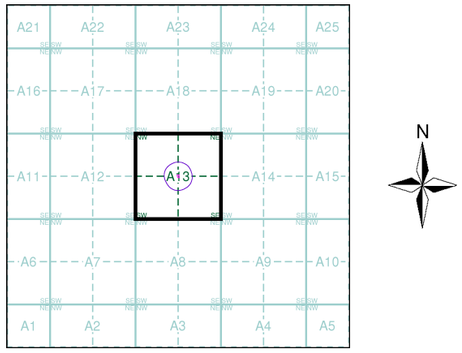
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

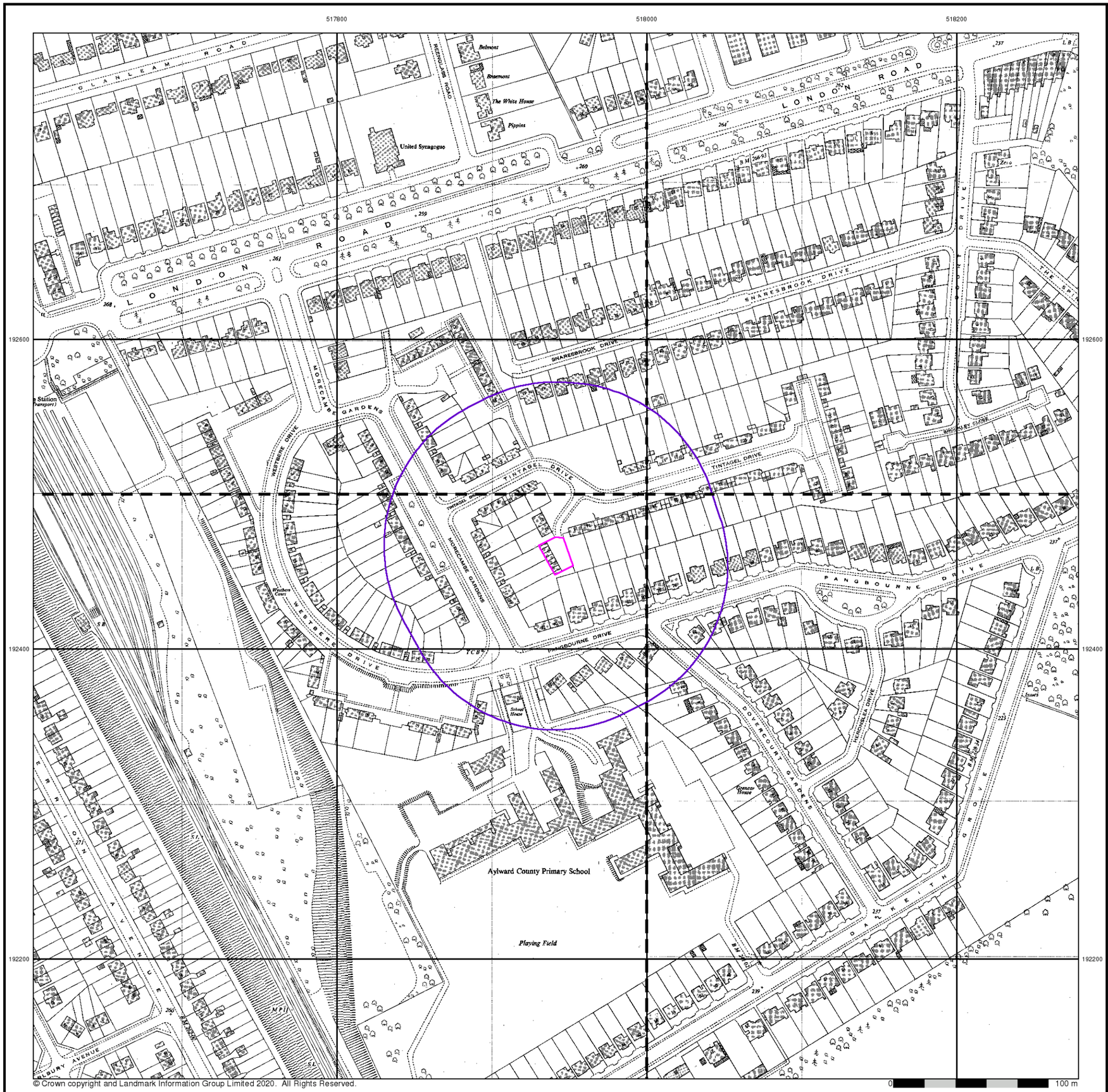
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Customer Ref:	LA20005
National Grid Reference:	517940, 192460
Slice:	A
Site Area (Ha):	0.04
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Ordnance Survey Plan

Published 1962 - 1963

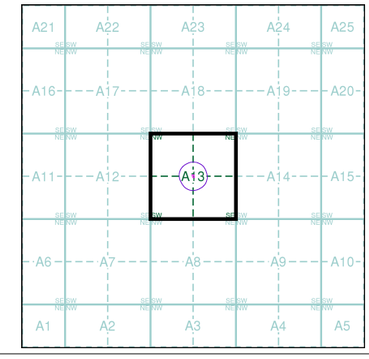
Source map scale - 1:1,250

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)

TQ1792NE 1962 1:1,250	TQ1892NW 1963 1:1,250
TQ1792SE 1962 1:1,250	TQ1892SW 1963 1:1,250

Historical Map - Segment A13



Order Details

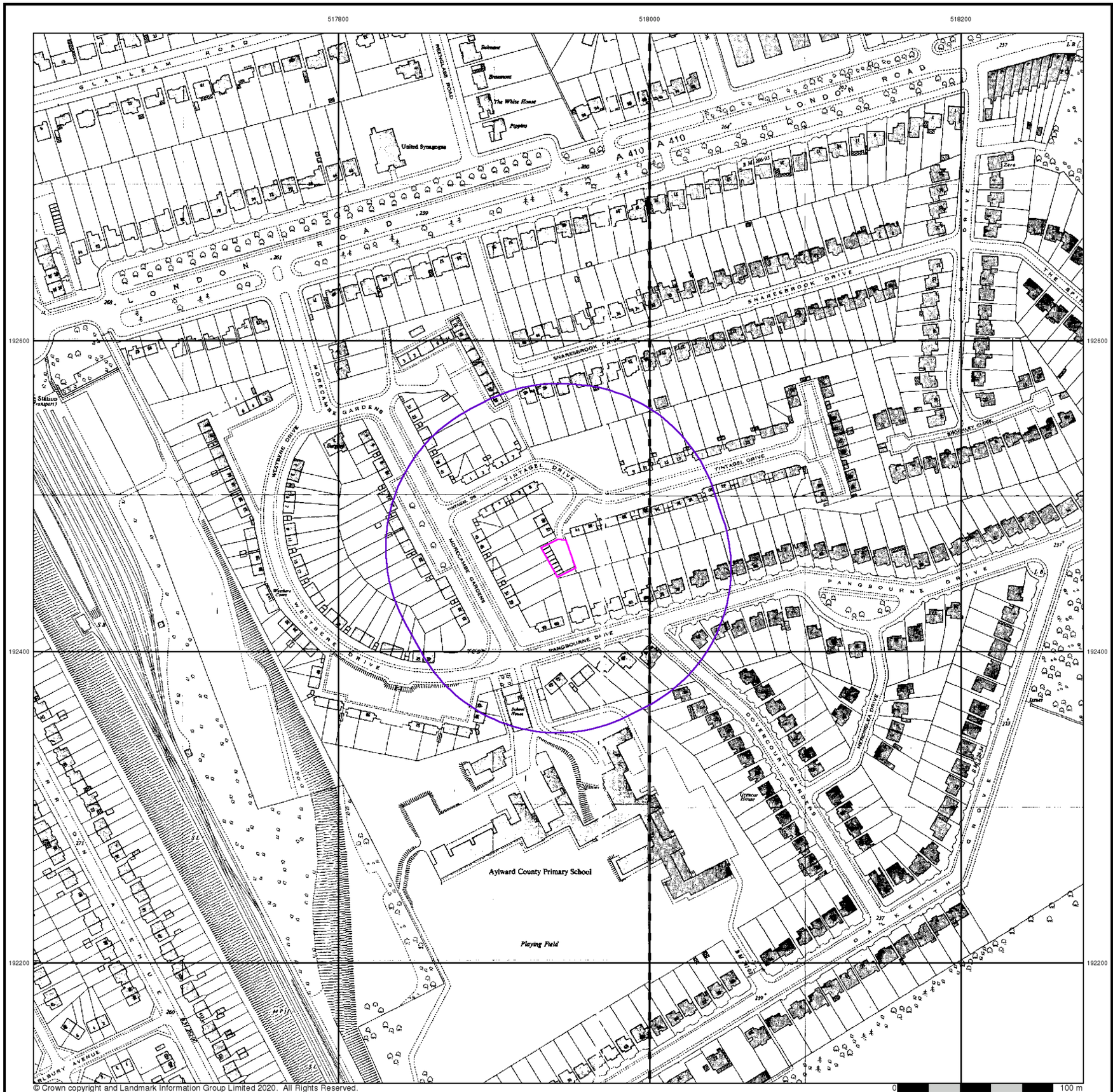
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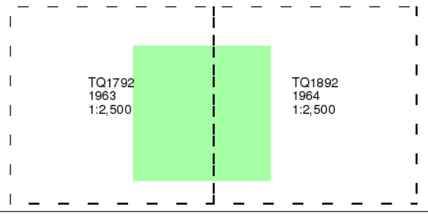
Ordnance Survey Plan

Published 1963 - 1964

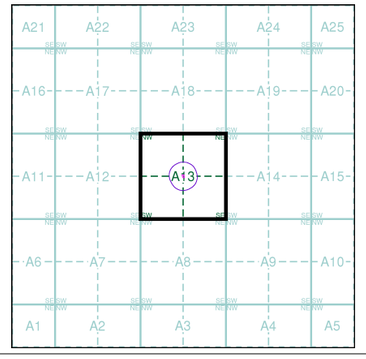
Source map scale - 1:2,500

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

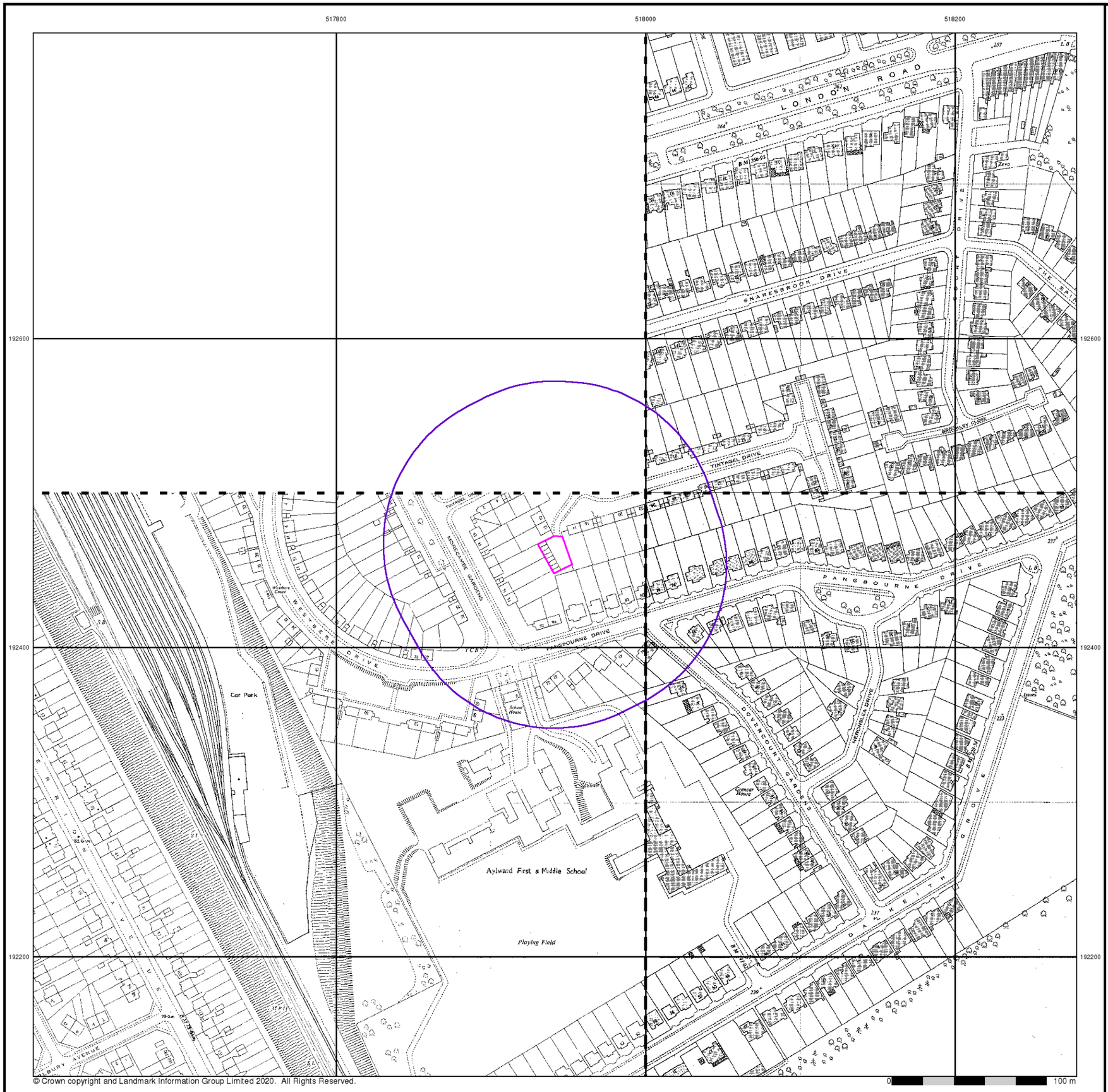
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Customer Ref:	LA20005
National Grid Reference:	517940, 192460
Slice:	A
Site Area (Ha):	0.04
Search Buffer (m):	100

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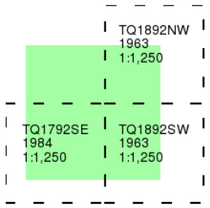
Additional SIMs

Published 1963 - 1984

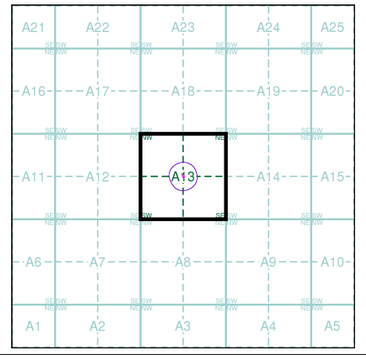
Source map scale - 1:1,250

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)



Historical Map - Segment A13



Order Details

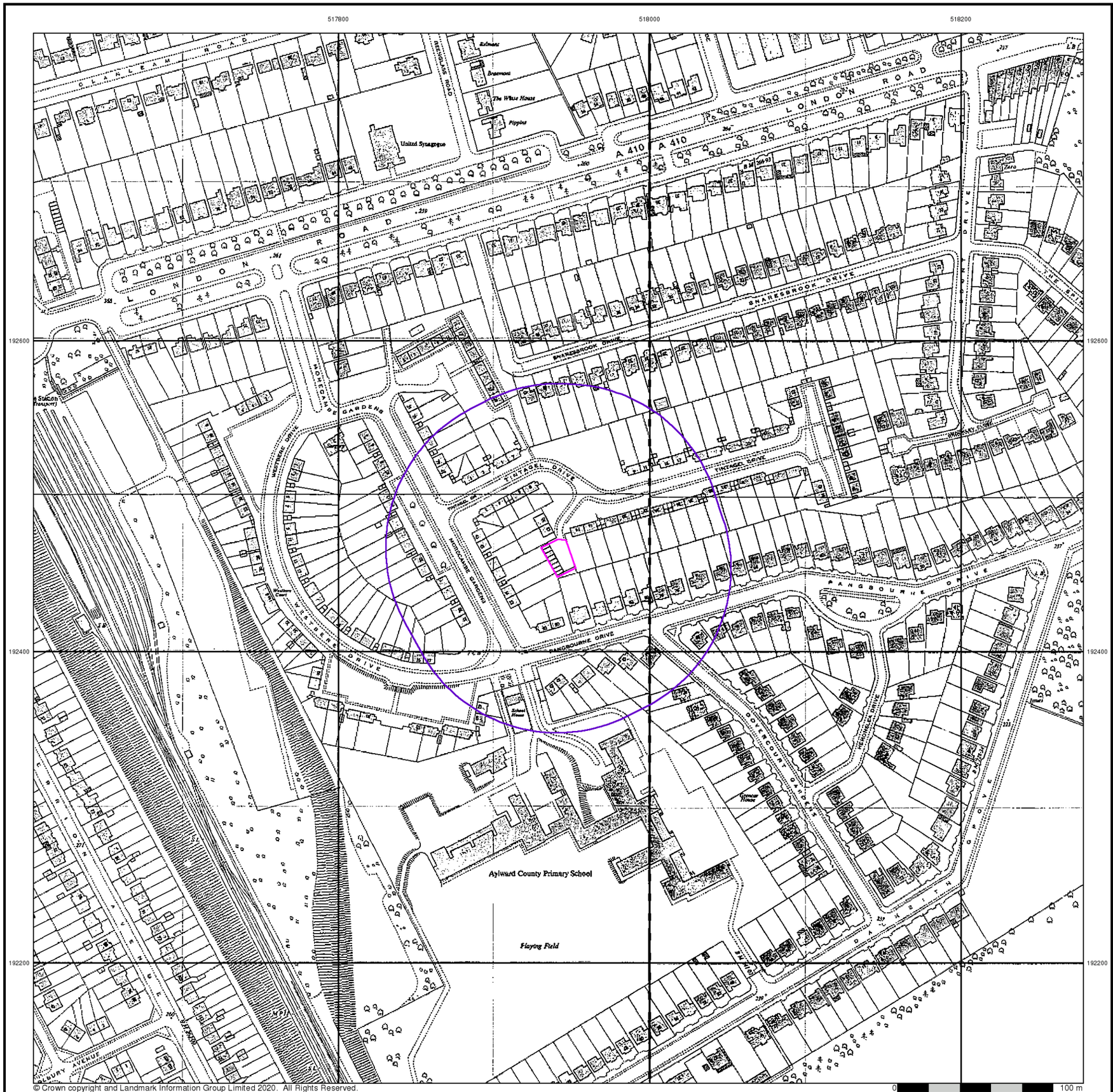
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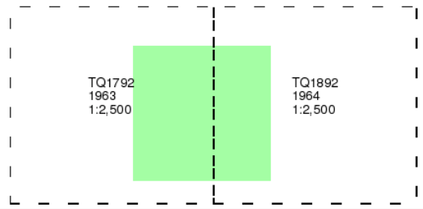
Additional SIMs

Published 1963 - 1964

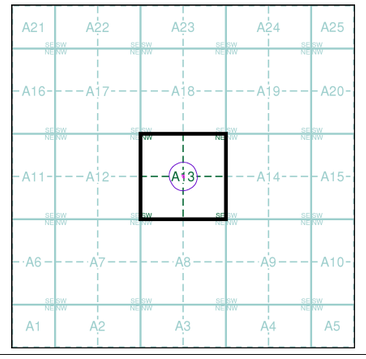
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



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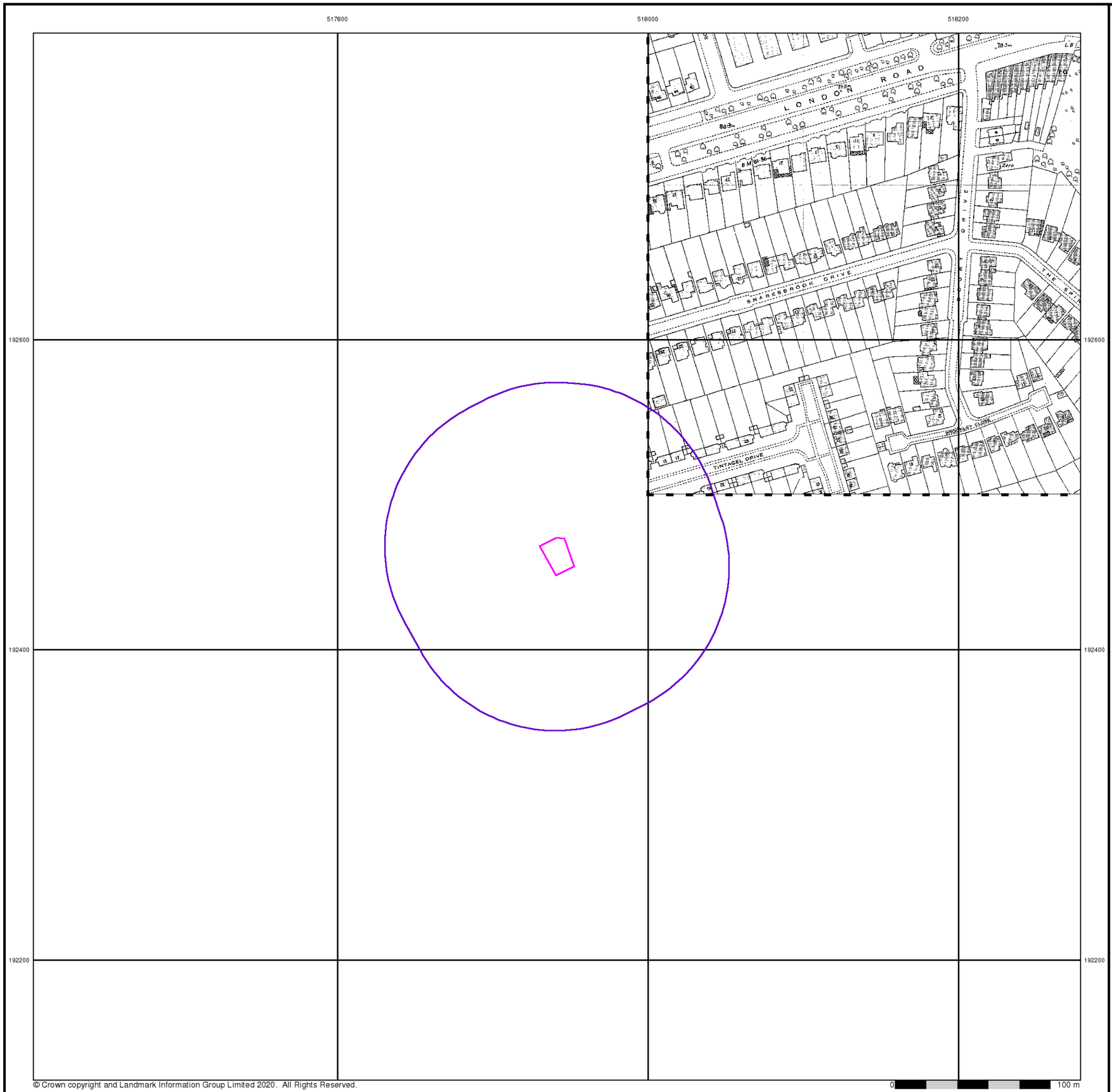
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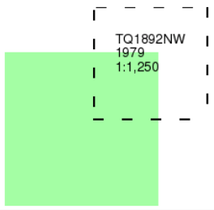
Additional SIMs

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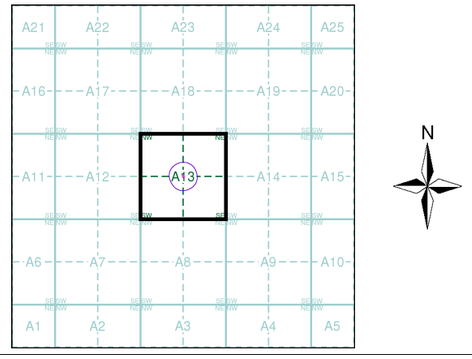
Source map scale - 1:1,250

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Map Name(s) and Date(s)



Historical Map - Segment A13



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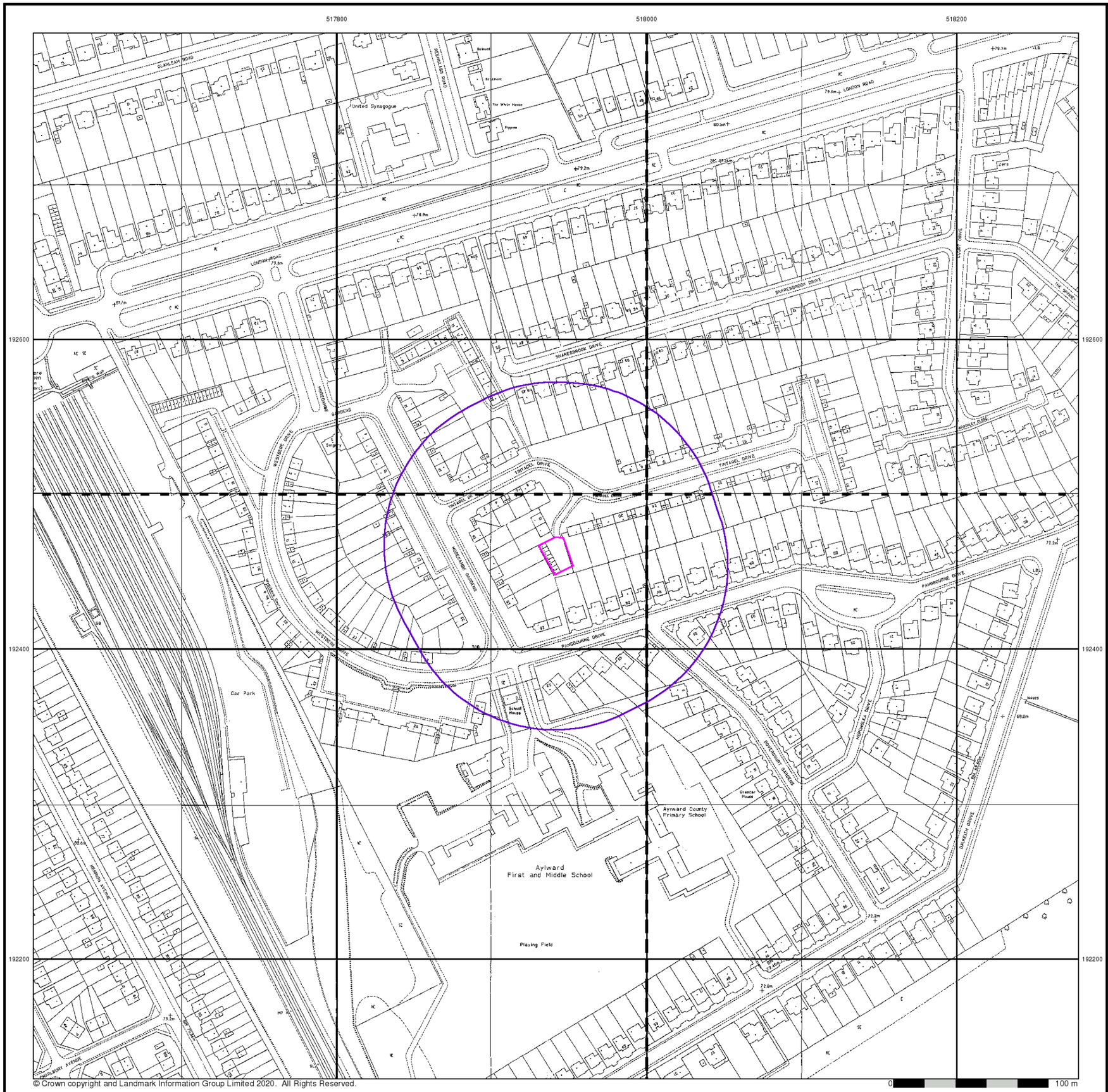
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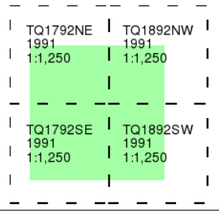
Large-Scale National Grid Data

Published 1991

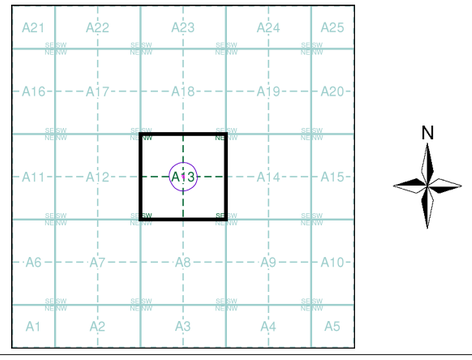
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. 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:	239089219_1_1
Customer Ref:	LA20005
National Grid Reference:	517940, 192460
Slice:	A
Site Area (Ha):	0.04
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Environmental - Geotechnical - Laboratory - Foundations
13 Triangle Business Park, Wendover Road
Stoke Mandeville, Bucks HP22 5BL
Tel. 01296 739400 Email: consultants@subadra.com

ATTACHMENT THREE:
GROUNDSURE REPORT

Groundsure LOCATION INTELLIGENCE

Geo Insight

GARAGES REAR OF 12, TINTAGEL DRIVE, STANMORE, HA7 4SR

Order Details

Date: 19/03/2020

Your ref: LA20005

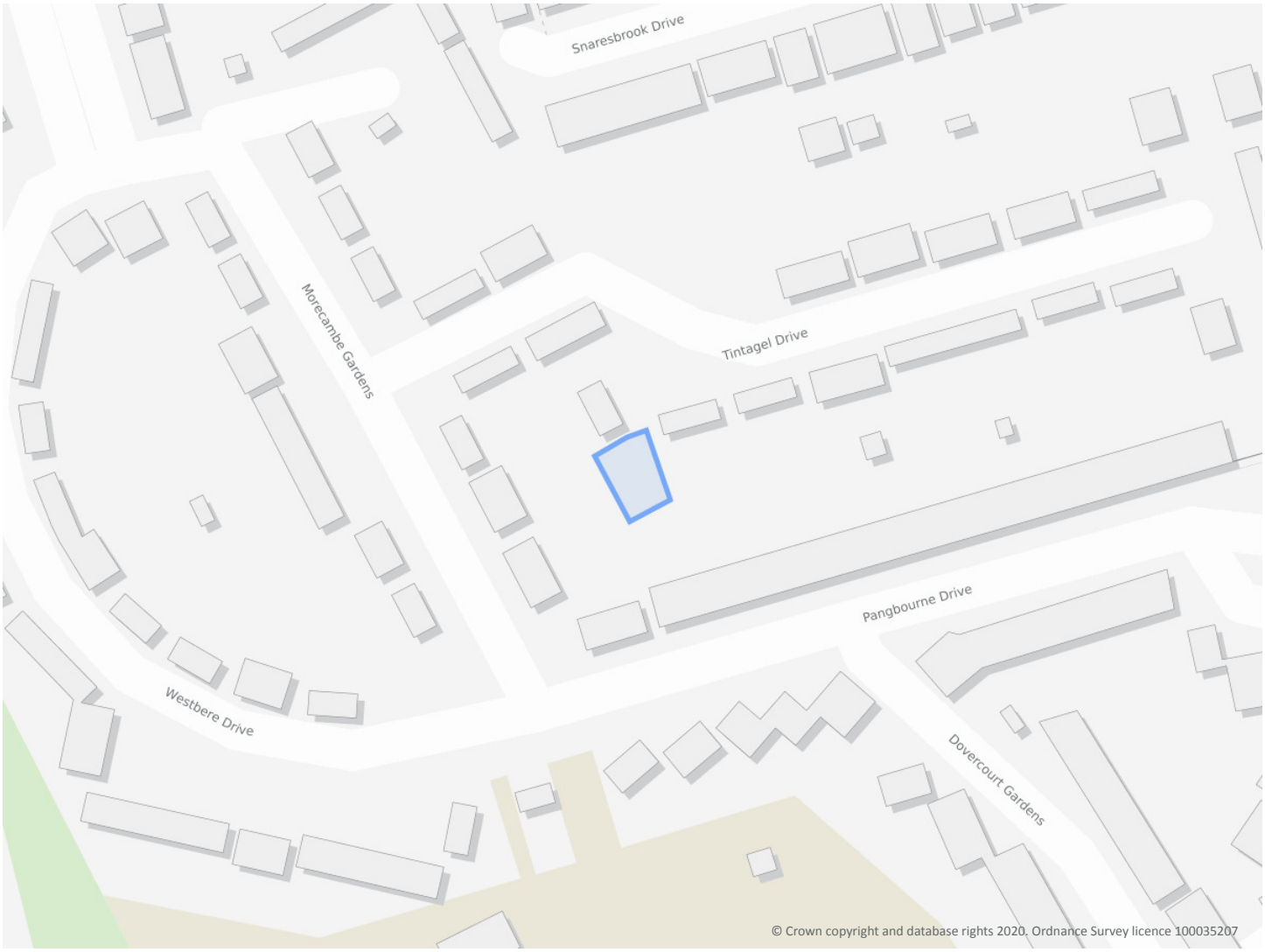
Our Ref: GS-6706651

Client: Subadra Consulting

Site Details

Location: 517944 192463

Area: 0.03 ha



Summary of findings p. 2

OS MasterMap site plan p. 8

Aerial image p. 5

groundsure.com/insightuserguide

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
9	1.1	10k Availability	Identified (within 500m)				
10	1.2	Artificial and made ground (10k)	0	0	0	0	-
11	1.3	Superficial geology (10k)	0	0	0	0	-
11	1.4	Landslip (10k)	0	0	0	0	-
12	1.5	Bedrock geology (10k)	1	0	0	0	-
13	1.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
14	2.1	50k Availability	Identified (within 500m)				
15	2.2	Artificial and made ground (50k)	0	0	0	0	-
15	2.3	Artificial ground permeability (50k)	0	0	-	-	-
16	2.4	Superficial geology (50k)	0	0	0	0	-
16	2.5	Superficial permeability (50k)	None (within 50m)				
16	2.6	Landslip (50k)	0	0	0	0	-
16	2.7	Landslip permeability (50k)	None (within 50m)				
17	2.8	Bedrock geology (50k)	1	0	0	0	-
18	2.9	Bedrock permeability (50k)	Identified (within 50m)				
18	2.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
19	3.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
20	4.1	Shrink swell clays	Moderate (within 50m)				
21	4.2	Running sands	Very low (within 50m)				
22	4.3	Compressible deposits	Negligible (within 50m)				
23	4.4	Collapsible deposits	Very low (within 50m)				
24	4.5	Landslides	Very low (within 50m)				
25	4.6	Ground dissolution of soluble rocks	Negligible (within 50m)				

Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
26	5.1	Natural cavities	0	0	0	0	-
27	5.2	BritPits	0	0	0	0	-
27	**5.3**	**Surface ground workings**	0	0	8	-	-
27	5.4	Underground workings	0	0	0	0	0
28	5.5	Historical Mineral Planning Areas	0	0	0	0	-
28	5.6	Non-coal mining	0	0	0	0	0
28	5.7	Mining cavities	0	0	0	0	0
28	5.8	JPB mining areas	None (within 0m)				
28	5.9	Coal mining	None (within 0m)				
29	5.10	Brine areas	None (within 0m)				
29	5.11	Gypsum areas	None (within 0m)				
29	5.12	Tin mining	None (within 0m)				
29	5.13	Clay mining	None (within 0m)				

Page	Section	Radon	
30	**6.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
31	**7.1**	**BGS Estimated Background Soil Chemistry**	1	3	-	-	-
31	**7.2**	**BGS Estimated Urban Soil Chemistry**	1	5	-	-	-
32	7.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
33	8.1	Underground railways (London)	0	0	0	-	-
33	8.2	Underground railways (Non-London)	0	0	0	-	-
34	8.3	Railway tunnels	0	0	0	-	-
34	**8.4**	**Historical railway and tunnel features**	0	0	6	-	-
34	8.5	Royal Mail tunnels	0	0	0	-	-
35	8.6	Historical railways	0	0	0	-	-
35	8.7	Railways	0	0	0	-	-
35	8.8	Crossrail 1	0	0	0	0	-

35	8.9	Crossrail 2	0	0	0	0	-
35	8.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 20/04/2015

Site Area: 0.03ha

Recent site history - 2013 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All Rights Reserved.

Capture Date: 28/04/2013

Site Area: 0.03ha

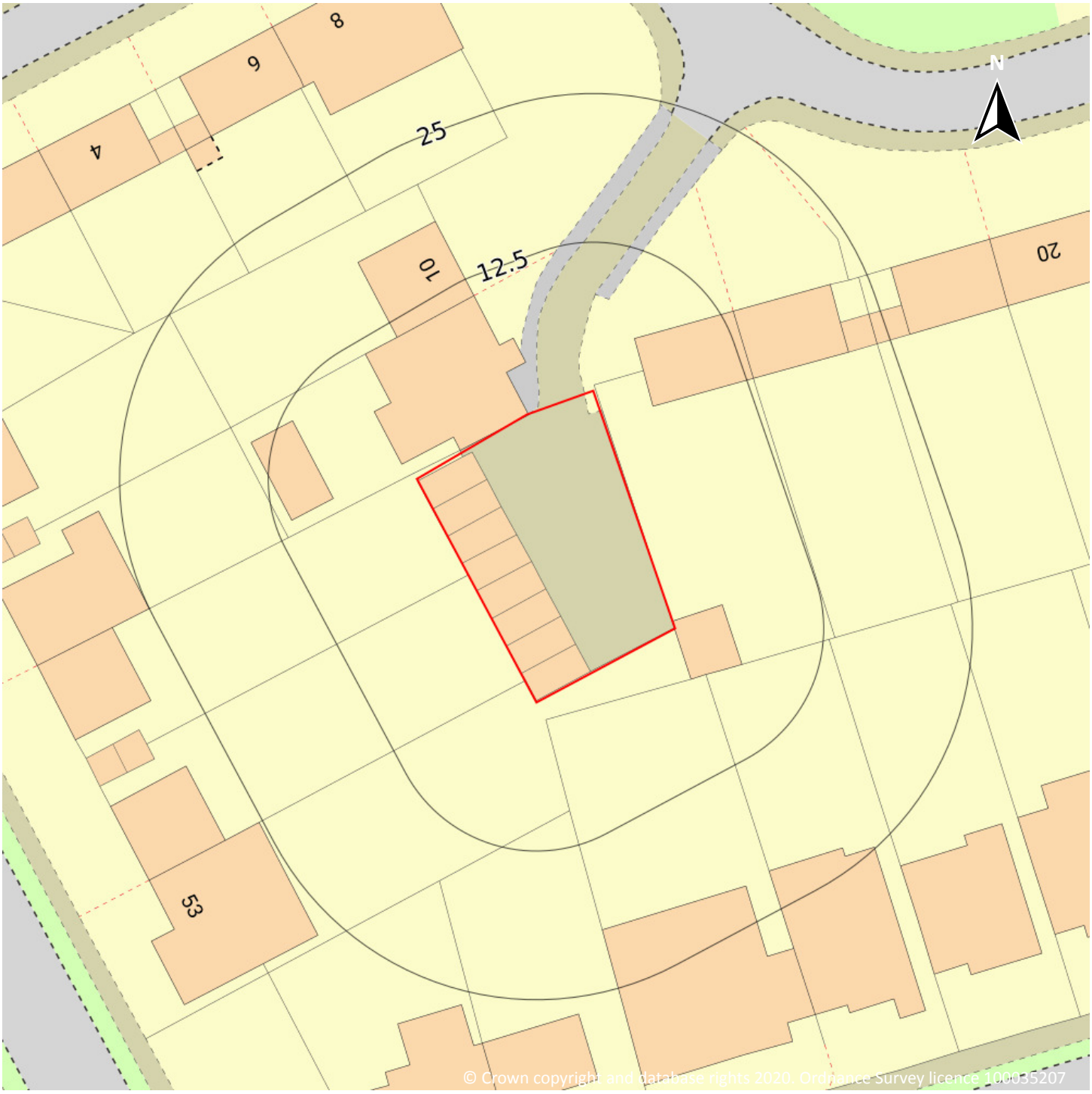
Recent site history - 1999 aerial photograph



Capture Date: 04/09/1999

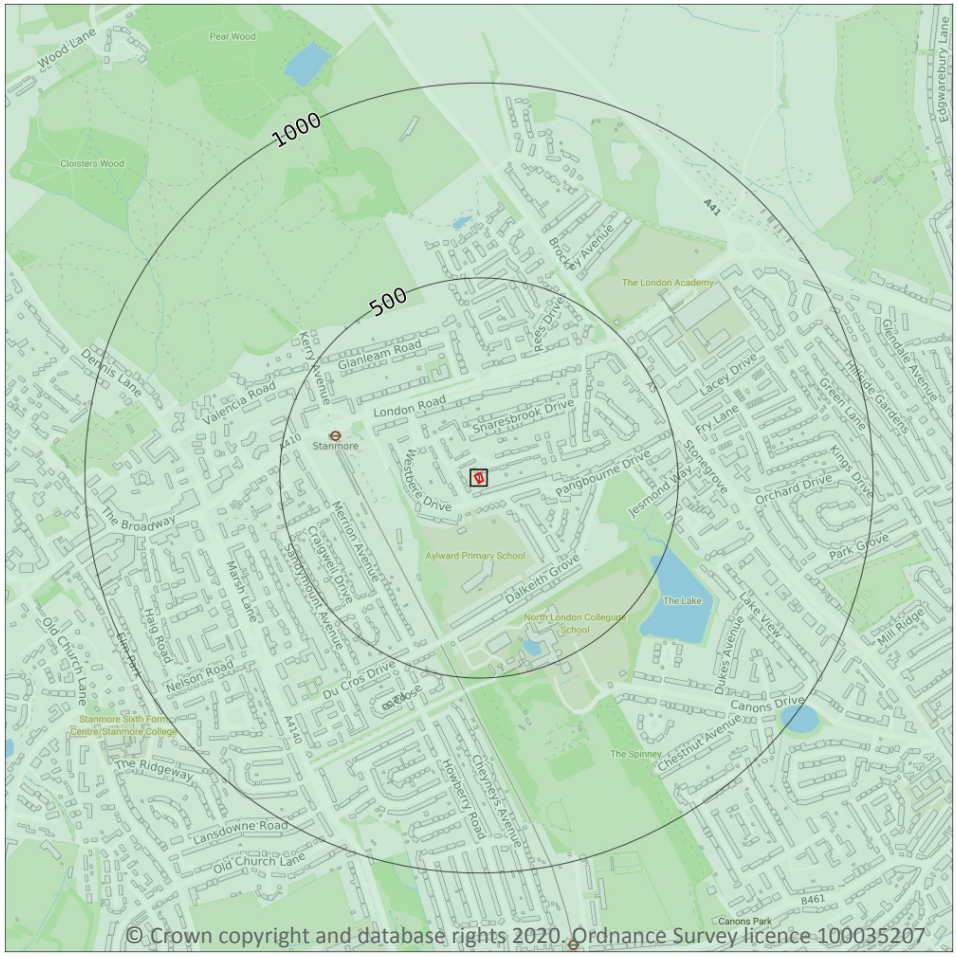
Site Area: 0.03ha

OS MasterMap site plan



Site Area: 0.03ha

1 Geology 1:10,000 scale - Availability



1.1 10k Availability

Records within 500m	1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 9**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TQ19SE**

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

1.2 Artificial and made ground (10k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

1.3 Superficial geology (10k)

Records within 500m	0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

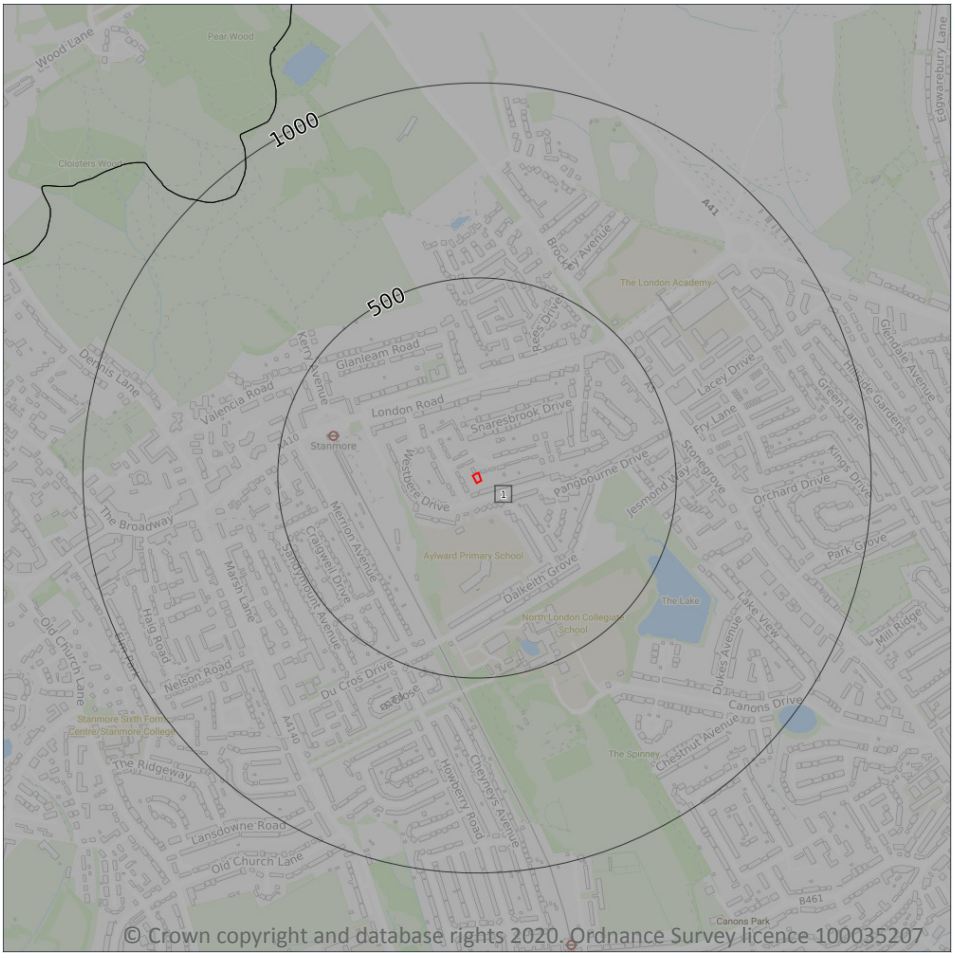
1.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

1.5 Bedrock geology (10k)

Records within 500m	1

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 12**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-CLAY**	**London Clay Formation - Clay**	**Eocene Epoch**

This data is sourced from the British Geological Survey.

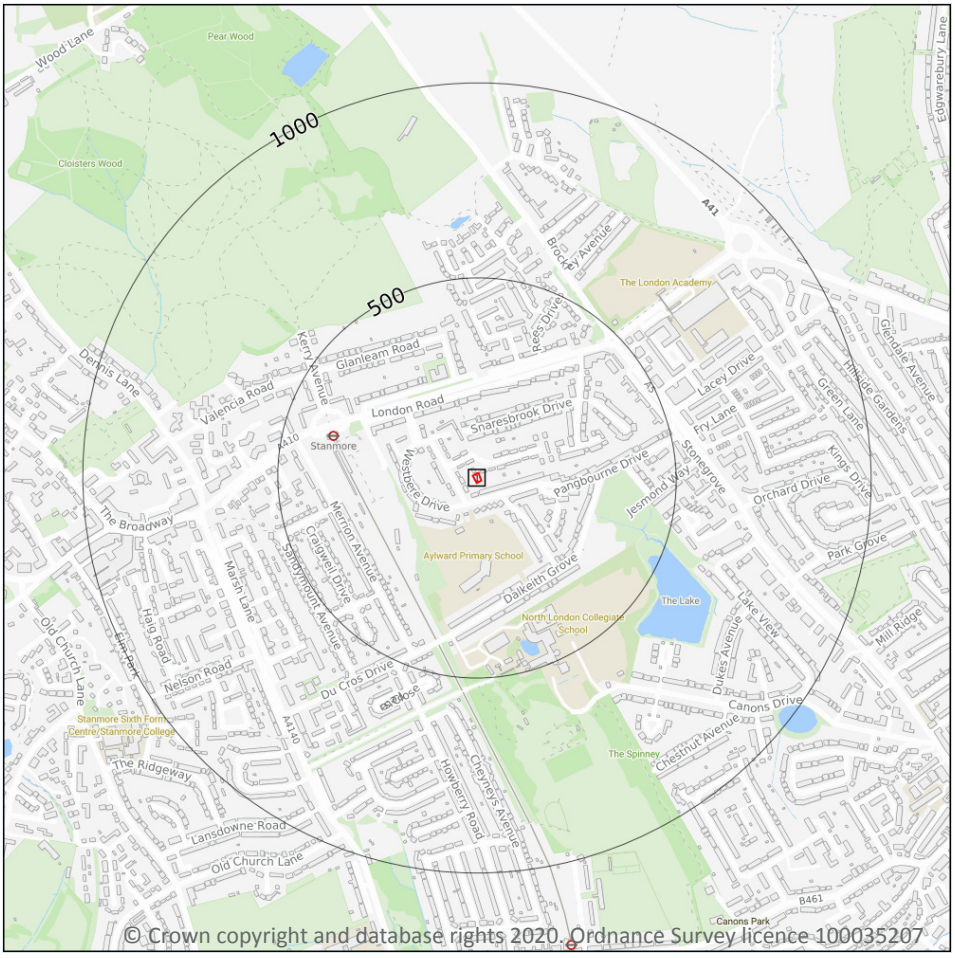
1.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

2 Geology 1:50,000 scale - Availability



2.1 50k Availability

Records within 500m	1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 14**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW256_north_london_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground

2.2 Artificial and made ground (50k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

2.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial

2.4 Superficial geology (50k)

Records within 500m	0

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

2.5 Superficial permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

2.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

2.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



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Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

2.8 Bedrock geology (50k)

Records within 500m	1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 17**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-XCZS**	**LONDON CLAY FORMATION - CLAY, SILT AND SAND**	**YPRESIAN**

This data is sourced from the British Geological Survey.

2.9 Bedrock permeability (50k)

Records within 50m	1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Moderate**	**Very Low**

This data is sourced from the British Geological Survey.

2.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

3 Boreholes

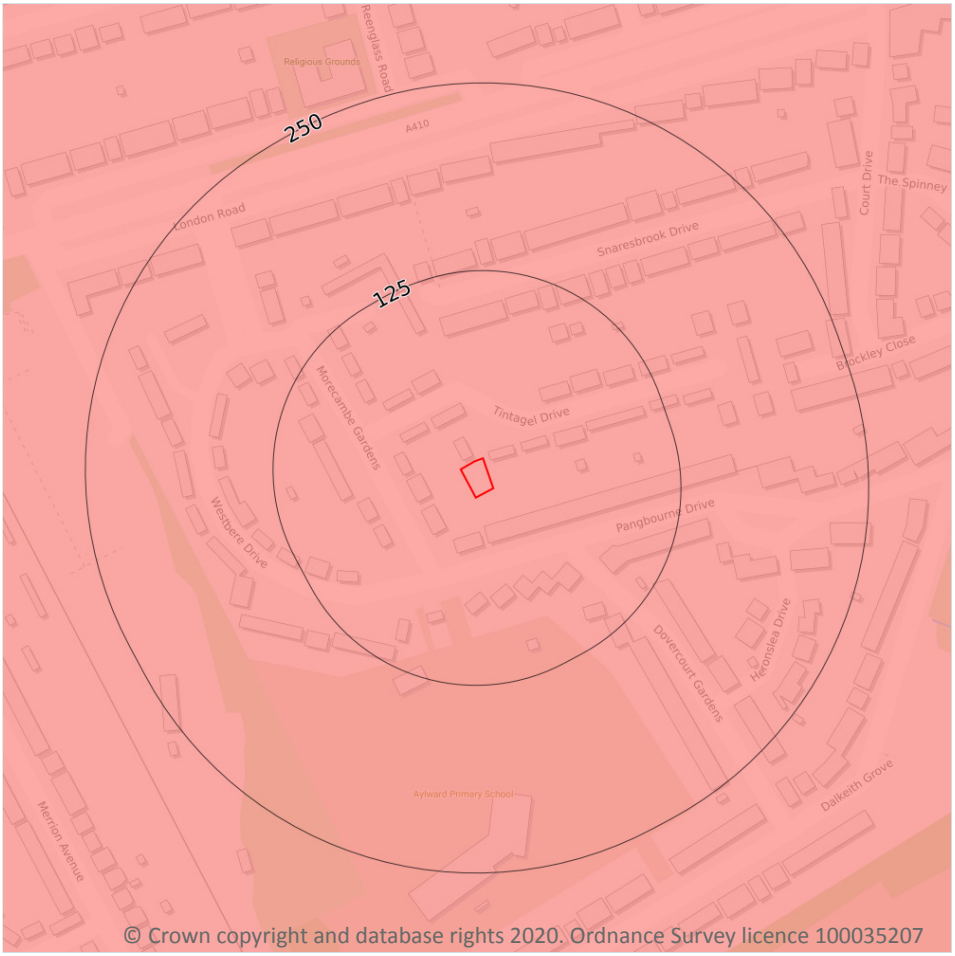
3.1 BGS Boreholes

Records within 250m	0

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

This data is sourced from the British Geological Survey.

4 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

4.1 Shrink swell clays

Records within 50m	1

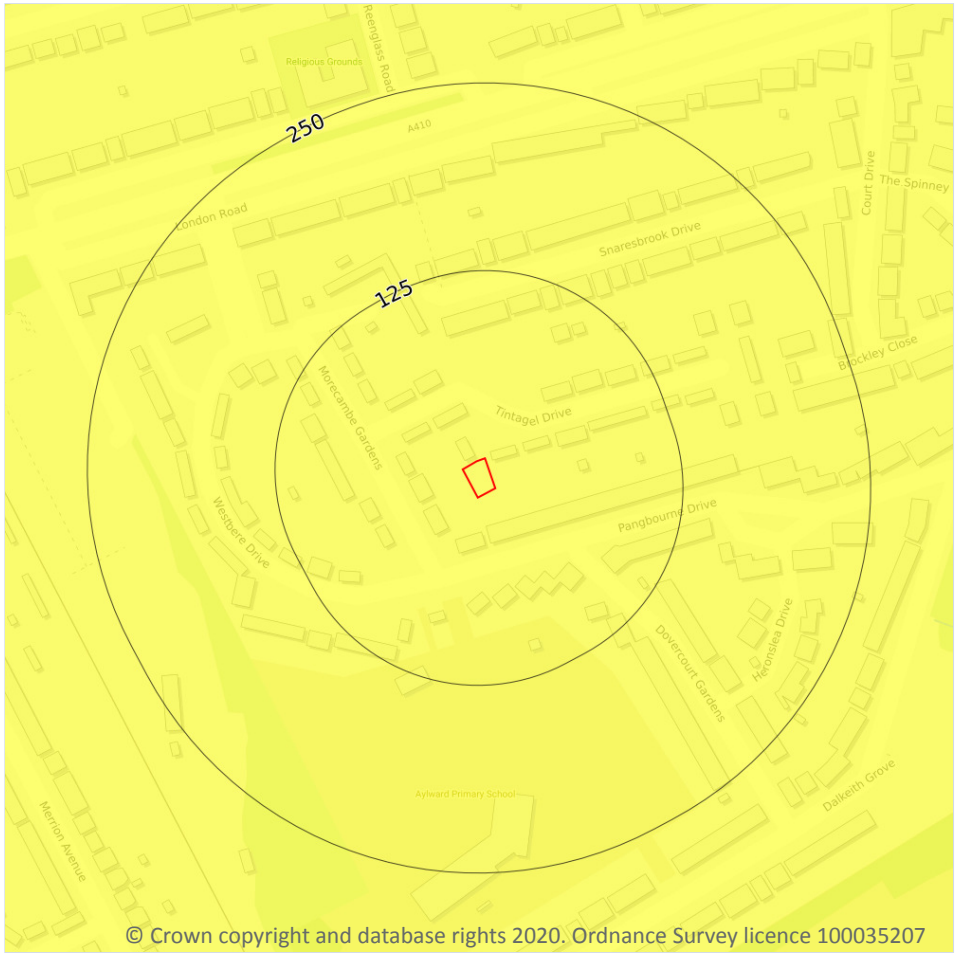
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 20**

Location	Hazard rating	Details
On site	**Moderate**	**Ground conditions predominantly high plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

4.2 Running sands

Records within 50m	1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 21**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

4.3 Compressible deposits

Records within 50m	1

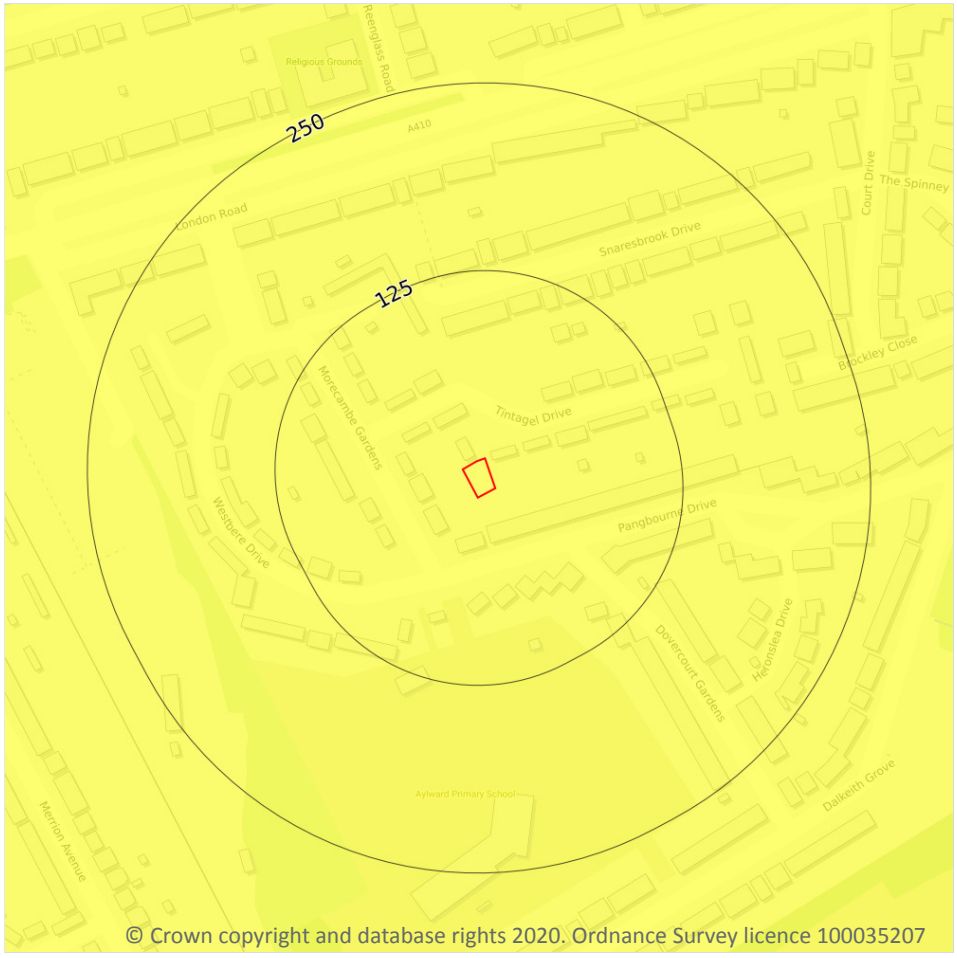
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 22**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

4.4 Collapsible deposits

Records within 50m	1

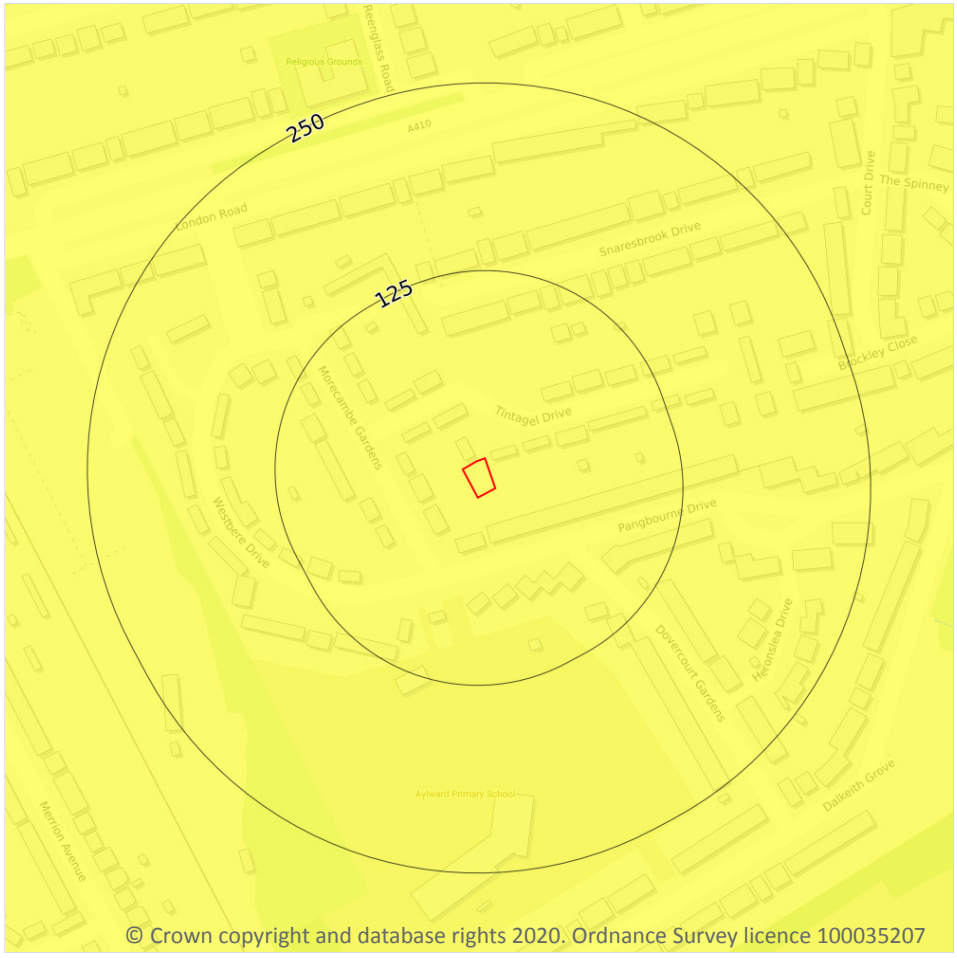
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 23**

Location	Hazard rating	Details
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

4.5 Landslides

Records within 50m	1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 24**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

4.6 Ground dissolution of soluble rocks

Records within 50m	1

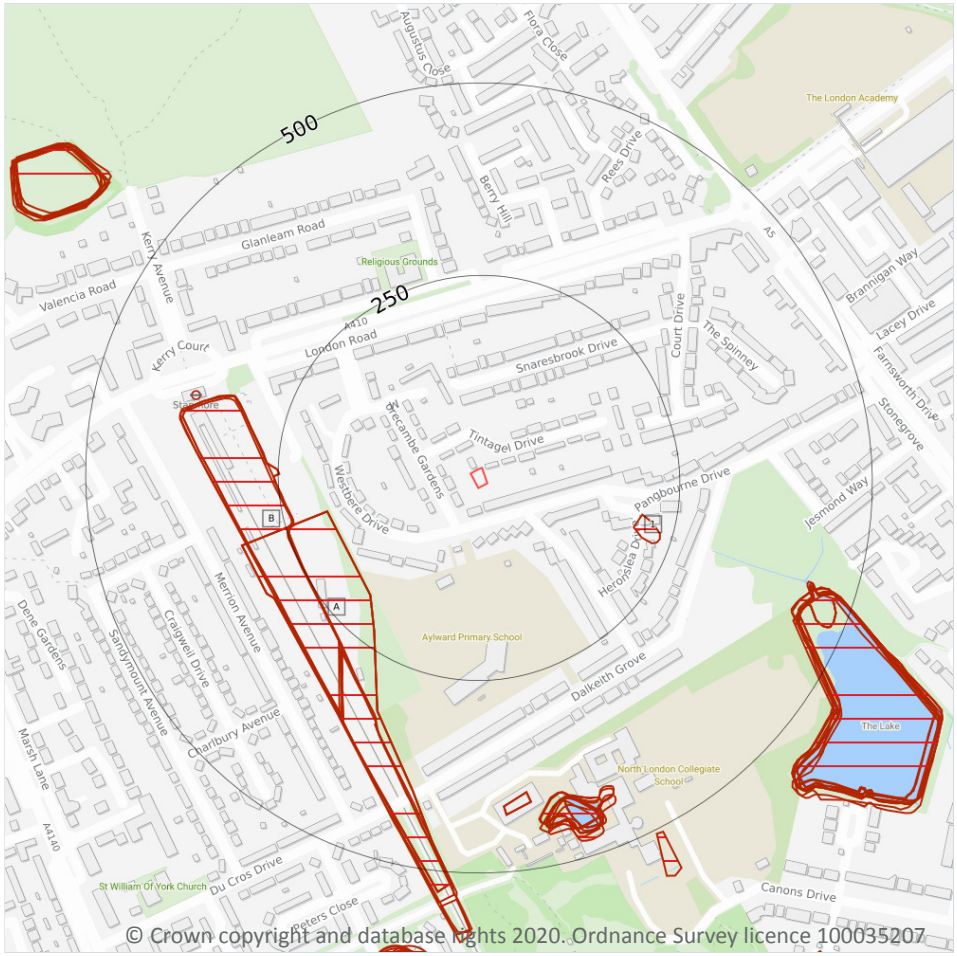
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 25**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

5 Mining, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

5.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Peter Brett Associates (PBA).

5.2 BritPits

Records within 500m	0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

5.3 Surface ground workings

Records within 250m	8

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 26**

ID	Location	Land Use	Year of mapping	Mapping scale
A	188m SW	Cuttings	1991	1:10000
A	188m SW	Cuttings	1974	1:10000
A	188m SW	Cuttings	1968	1:10560
1	198m E	Unspecified Pit	1868	1:10560
B	238m W	Cuttings	1938	1:10560
B	238m W	Cuttings	1935	1:10560
2	239m W	Cuttings	1950	1:10560
B	241m W	Cuttings	1938	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

5.4 Underground workings

Records within 1000m	0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

5.5 Historical Mineral Planning Areas

Records within 500m	0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

5.6 Non-coal mining

Records within 1000m	0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

5.7 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Peter Brett Associates (PBA).

5.8 JPB mining areas

Records on site	0

Areas which could be affected by former coal mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

5.9 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

5.10 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

5.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

5.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

5.13 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

6 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

6.1 Radon

Records on site	1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 30**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None****

This data is sourced from the British Geological Survey and Public Health England.

7 Soil chemistry

7.1 BGS Estimated Background Soil Chemistry

Records within 50m **4**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**No data**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**No data**	**No data**
26m NW	No data	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	No data	No data
48m S	No data	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	No data	No data
48m SE	No data	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	No data	No data

This data is sourced from the British Geological Survey.

7.2 BGS Estimated Urban Soil Chemistry

Records within 50m **6**

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	**15**	**2.6**	**82**	**56**	**0.8**	**85**	**26**	**27**	**5**
26m N	15	2.6	136	93	0.8	82	36	28	7
31m W	15	2.6	76	52	0.8	86	26	27	5
45m NW	14	2.5	173	119	1	83	44	29	8
48m E	15	2.6	119	82	0.7	82	28	26	6

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
48m S	15	2.6	69	47	0.8	87	24	27	4

This data is sourced from the British Geological Survey.

7.3 BGS Measured Urban Soil Chemistry

Records within 50m	**0**

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

8 Railway infrastructure and projects



Site Outline

Search buffers in metres (m)

- Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

8.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

8.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

8.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

8.4 Historical railway and tunnel features

Records within 250m	6

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 33**

Location	Land Use	Year of mapping	Mapping scale
225m W	Railway Sidings	1991	10000
225m W	Railway Sidings	1974	10000
228m W	Railway Sidings	1984	1250
228m W	Railway Sidings	1968	10560
239m W	Railway Sidings	1950	10560
248m W	Railway Sidings	1962	2500

This data is sourced from Ordnance Survey/Groundsure.

8.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

8.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

8.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

8.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

8.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

8.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference.

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