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HARRINGTON SQUARE, CAMDEN

Phase I Geo-Environmental Assessment Report

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1.0 INTRODUCTION

1.1 Context

This report describes a desk-based Phase I Geo-Environmental Assessment Report carried out by Brownfield Solutions Limited (BSL) for Renaissance Ltd as instructed by Renaissance Ltd on a site at the Land adjacent to Hurdwick House, Harrington Square, Camden and has been completed in general accordance with the following guidance:

- Environment Agency guidance - Land Contamination: Risk Management (LCRM).
- BS 10175:2011+A2:2017 Investigation of Potentially Contaminated Sites.
- BS5930: 2015+A1:2020 Code of Practice for Ground Investigations.
- BS EN 1997-1:2004+A1:2013 Eurocode 7. Geotechnical design. General rules plus UK National Annex.
- BS EN 1997-2:2007 Eurocode 7 Geotechnical design. Ground investigation and testing plus UK National Annex.
- NHBC Standards. Chapter 4.1: Land Quality - Managing Ground Conditions.

Definitions of terms and acronyms used within this report is presented in Section 8.0.

1.2 Proposed Development

The proposed development is for a residential end use 5 storey building plus basement with associated infrastructure as shown on the proposed development plan, drawing No. 0010-0310 provided to renaissance by the client.

1.3 Objectives and Scope

The objectives of this assessment were to determine the environmental setting and ground conditions of the site, highlighting potential areas of concern that may govern the redevelopment.

The scope of works comprises a Phase I Assessment and site walk-over, with a review of the site, surroundings, historical uses and environmental setting in order to develop a preliminary Conceptual Site Model (CSM).

This report is intended to meet the requirements of a Preliminary Investigation as defined in BS10175:2011+A2:2017 and has been produced in general accordance with the recommendations for a Tier 1 Preliminary Risk Assessment as described in LCRM guidance.

1.4 Limitations

This Phase 1 Geo-Environmental Assessment Report has been prepared in accordance with the relevant legislative framework, guidance and risk assessment methodology as outlined in Appendix A.

The findings and opinions conveyed via this assessment are based on information obtained from a number of sources as detailed within this report, renaissance have assumed this information is correct and reliable. Nevertheless, renaissance cannot and does not guarantee the authenticity or reliability of the information it has relied upon.

Renaissance have used reasonable skill, care and diligence in the production of this report. There may be other conditions prevailing on the site which are outside the scope of work and have not been highlighted by this assessment and therefore have not been taken into account by this report. Responsibility cannot be accepted for such site conditions not revealed by the assessment.

This report has been prepared for the sole use and reliance of the Client. No other third party may rely upon or reproduce the contents of this report without the written permission of renaissance; a charge

may be levied against such approval. If any unauthorised third party comes into possession of this report, then they rely on it at their own risk and renaissance do not owe them any Duty of Care.

Any recommendations made in this report should be confirmed with the Regulatory Authorities prior to implementation to ensure compliance.

This assessment has been based on the proposed planning layouts provided. Any subsequent change to the planning layout may have an impact on the validity of recommendations made within this report. Furthermore, new information, changed practices or new legislation may necessitate revised interpretation of the report after the date of its submission.

The site plans enclosed in this report should not be scaled off. Any site boundary line depicted on plans does not imply legal ownership of land.

Notwithstanding site observations concerning the presence or otherwise of archaeological issues, asbestos-containing materials (ACM) or invasive weeds (e.g. Japanese knotweed), this report does not constitute a formal survey of these potential issues and specialist advice should be sought.

2.0 THE SITE

2.1 Location

The site is located off Harrington Square, Camden, NW1 2JE, centred on National Grid Reference 529190, 183298 as shown on the Site Location Plan, Drawing No. C5331/01.

2.2 Site Description

A site reconnaissance survey was carried out at the site on 15nd February 2023. The main site features and potential issues identified during this survey are detailed below and are shown on the Site Features Plan, Drawing No. C5331/02. A selection of photographs from the site walkover are presented to the rear of this report.

Feature	Description
Site Area	Approximately 0.04 hectares.
Site Access	Access to the site is gained off Harrington Square to the south through a ~3.5m wide, locked metal gate
Current Land Use and Site Features	The site comprises of a gated car park to the southeast with associated hardstanding and soft landscaped areas.
Potential Sources of Gross Contamination	None identified from the walkover.
Vegetation	Along the southern boundary of the site with Harrington Square a hedge is located. In the northwest corner of the site a small area of grass is located. There are two moderately-sized apple trees in the west of the site, located in the soft landscaping.
Topography	The site is generally flat with a slight dip towards the northeast.
Site Boundaries	A low brick wall, approximately 1m in high with metal fencing mounted on top to approximately 2m in height. A hedge is located protruding through and over this metal fence. A small section of wooden fencing is also located on this low brick wall. To the north, east and west the site is bordered by a mix of residential building and commercial buildings. Drainage covers are noted adjacent to the northwest boundary of the site.
Surrounding Area	The site is set within a densely developed area with a mix of residential and commercial buildings. There are apartments immediately adjacent to the northwest of the site. To the north of the site the Mornington Crescent Underground Station is located. To the south west of the site the Harrington Square Gardens are located with associated mixed variety of vegetation. The properties which were in the same terrace as the subject site along Harrington Square are noted to have basements.

3.0 GEO-ENVIRONMENTAL SETTING

3.1 Historical Setting

A review of the available historical Ordnance Survey Maps and satellite imagery has been conducted, with the pertinent issues that may have affected the site, or its environs, summarised below. The Historical Maps are presented in Appendix B. A review of the historical industrial data within the geo-environmental data report has also been undertaken below, the report is presented in Appendix C.

Notable features on site, and potentially contaminative or geotechnically relevant features within 100m of the site boundary have been presented. Any features that have potentially been infilled will be considered up to 250m from the site boundary.

Feature(s)	Distance (m) & Direction	Years Present	Description
Previous Development	Onsite – Full site	1873 - 1957	Budlings of unknown use are present onsite from 1873 to between 1916 to 1957. The buildings appear to be terraced with a garden to the north east.
Electrical Railway Station	Onsite	1948 - Present	Groundsure report indicated an Electrical Railway Station on site (assumed it's underneath the site). The shape of the polygon on the map suggests this is infrastructure associated with the underground station and this is corroborated with street view imagery (Mornington Crescent Station). It is noted that although the feature is listed on site, it only touches the northern point of the site.
Car Park	On site	1999 – Present	A car park has potentially existed onsite from between 1916 – 1999 to the present.
Railway Tracks	20m West	1896 – 1916	Railway tracks were present from 1896 slightly west of the site and are present until between 1916 – 1952. This correlates with the modern existing Northern Line.
Tobacco Works	40m West	1952 – 1963	The "Aracdia Works" a tabacco works first appears in mapping in 1952 and become the "Greater London House between 1952 and 1963. The Greater London House which is associated with offices.
Electrical Sub Substation	From 62m East	1972 - 1986	An electrical substation is located approximately 62m east of the site from 1972 to between 1986 to 1992.
Post Office	80m East	1873 - 2003	A Post Office (North West District) has been present from 1873 to 2003. It is no longer present.

In summary, the map evidence indicates that the site has only been developed twice, firstly with multiple buildings from 1873 to between 1916 and 1957. The car park was developed between 1916 and 1999. Infrastructure for the Mornington Crescent Tube Station on the Northern Line may or may not underlie the northern tip of the site.

Historical land use in the surrounding area has been predominantly residential and commercial.

3.2 Published Geology

The following publications of the British Geological Survey (BGS) were examined in respect of the geology underlying the site:

- British Geological Survey (BGS) 1:50,000 Scale Geological Map Sheet 256 North London. Solid and Drift Edition.
- BGS GeoIndex Onshore.
- Coal Authority Interactive Map.
- Geo-Environmental Data Report.

Extracts of the 1:10,000 geological mapping from the Geo-Environmental Data Report are presented below for reference:

BGS 1:10 000 Superficial Geology	BGS 1:10 000 Solid Geology
Not Applicable	

Made Ground
BGS mapping does not display any made ground deposits on site, however based on the historical mapping and the development that has taken place, made ground deposits are likely to be present. Information from the Geo-Environmental Data Report presented in Appendix C also indicates no made ground on site, however worked ground has been identified 20m west of this site.

Superficial Deposits
No superficial deposits are mapped onsite. BGS mapping indicates the Langley Slit Member, which typically consists off silt to clay, is located approximately 725m to the south of the site.

Solid Geology
The deeper solid geology is indicated to be part of the London Clay Formation which typically comprises of clay, silt and sand.

No faults are shown on or within an influencing distance of the site.

3.3 BGS Exploratory Hole Records

There is one BGS exploratory hole records within a relevant distance of the site (assumed as an approximate 50m radius).

A summary of the ground conditions is presented in the table below.

Reference	Distance from Site (m) and Direction	Depth Made Ground (m)	Depth Superficial Deposits (m)	Depth Solid Geology (m)
High Street & Eversholt St Pancras	69m North	GL-1.22m	1.22 – 1.83 – River Mud – Assumed Alluvium deposit	1.83 – 7.01 - Clay

The BGS Borehole Logs are presented in Appendix D.

3.4 Mining and Mineral Extraction

The site is outside the area of a designated coalfield or brine extraction area and no further consideration of coal mining/brine related risks is required.

3.5 Hydrogeology

Based on the inferred geology, a summary of the Environment Agency aquifer designations is presented in the table below:

Stratum	Coverage	Aquifer Designation
London Clay Formation – Bedrock	Full Site	Unproductive Strata. These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

A summary of the pertinent hydrogeological features within the Geo-Environmental Data Report are provided below:

Feature	Distance (m) & Direction	Details
Nearest Active Groundwater Abstraction	1027m South east	Licence No: TH/039/0039/064/R01 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BIDBOROUGH HOUSE, 20 MABLEDON PLACE, LONDON Annual Volume (m3): 327,600 Original Start Date: 24/05/2019
Nearest Active Potable Groundwater Abstraction	1438m North	Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Annual Volume (m3): 17,997 Original Start Date: 16/06/1966
Source Protection Zones	-	None within 500m.

3.6 Hydrology

A summary of the pertinent hydrological aspects within the Geo-Environmental Data Report are provided below:

Feature	Distance (m) & Direction	Details
Nearest Watercourse	~ 740m North east	Regent's Canal
Nearest Surface Water Abstraction	978m North west	Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: SOUTHAMPTON BRIDGE, LONDON, NW8 - REGENTS CANAL Annual Volume (m3): 7,010,000 Original Start Date: 18/07/1980
Closest Active Licenced Discharge Consent	395m North east	Process: Dry Cleaning Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

Information obtained from the Environment Agency (EA) Risk of Flooding from Rivers and the Sea (RoFRaS) database indicates that there is no risk of flooding across the site.

The British Geological Survey indicate there is a potential for groundwater flooding at the subject site, with a low risk rating.

No further consideration of flood risk is undertaken in this report.

3.7 Landfill and Waste Management Sites

There are no landfill sites recorded within 500m.

There are three recorded historical waste sites, all them are at 344m North of the site and are a registered Scrap Metal Works/Depot dated, 1984, 1968 and 1968.

There are no current waste management sites recorded within 250m of the site.

A historic licensed waste site is recorded as:

Type of Site: Metal Recycling Site (mixed MRS's)
Environmental Permitting Regulations (Waste) Licence Number: ARB001
EPR reference: EA/EPR/EP3491NW/A001
Waste Management licence No: 80302
Issue Date: 05/06/1997
Status: Expired

3.8 Environmental Regulatory Data

A summary of the relevant environmental aspects, both on site and within 250m of the site contained in the Geo-Environmental Data Report, are presented in the table below:

Entry	On-site	0 – 50m	50 – 250m	Details
Recent Industrial Land Uses	-	1	16	An underground network station is located 38m north of the site. Other industrial land uses beyond 50m include, but are not limited to, industrial products and features, recycling services, motoring services as well as vehicle hire, rental and repair.
Current or Recent Fuel Stations	-	-	1	The nearest entry is 54m north of the site and is noted to be obsolete.
Licensed Industrial Activities (Part A(1))	-	-	-	
Licensed Pollutant Release (Part A(2)/B)	-	-	2	Both entries are located 144m to the north and registered to a dry-cleaning service, it's current status is historic.
Radioactive Substances	-	-	-	
Pollution Incidents (EA/NRW)	-	-	-	

3.9 Radon

Information from the environmental database report indicates the property is in an area where <1% of properties are above the Action Level for radon, and therefore radon protective measures are not required in accordance with BRE Report 211 'Radon – Guidance on protective measures for new dwellings' 2015 Edition.

3.10 UXO Risk

In accordance with CIRIA Report C681, renaissance have reviewed non-specialist UXO data for the site using the online Zetica Bomb Risk Mapping data.

The 1952 OS mapping the area concerning this report to have the buildings no longer present from 1928 – 1952, this could suggest bomb damage from WW2 but there appear to be no other signs of damage to the surround area. The Bomb Damage map (https://layersoflondon.humap.site/map/overlays/bomb-damage-1945) confirms significant damage to this row of terraces from the second world war.

The Groundsure report indicates Cavalry Barracks and Barracks present approximately 340m west of the site dated from 1938 to 1948 and 1920, respectively.

The Regent's Park Barracks are located approximately 370m to the west present from between 1896 to 1920 until 1989. The map indicates the site to be in an area where the bomb risk is high. A copy of the map is presented in Appendix F.

Since the site is considered to be at high bomb risk, in order to determine if and what further action may be required to mitigate the risk, the next stage would be to follow the recommended process set out in CIRIA Report C681 and carry out a preliminary risk assessment or undertake a full detailed risk assessment. Intrusive works on site may also require supervision by a UXO specialist.

4.0 PHASE 1 SUMMARY AND RISK ASSESSMENT

4.1 Introduction

The risk posed by any contaminants in soil or groundwater will depend on the nature and level of the source, the probability of exposure occurring, the potential pollution pathway and the likely effects on the receptors.

A contaminant is defined as a substance that has the potential to cause harm, a risk is considered to exist if such a substance is present at sufficient concentrations to cause harm and if a pathway is present through which a receptor could be exposed to the contaminant.

The following sections discuss the identified potential on-site and off-site sources, and any pollution that could impact receptors via the pathways associated with the proposed development. Pollution linkages are assessed which may represent a risk to human health and/or controlled water receptors from the information gained from the Phase I Assessment searches. The assessment has been carried out on a qualitative basis and aims to produce a complete and comprehensive Preliminary Conceptual Site Model.

Three potential impacts exist for any given site and all three need to be considered in the qualitative risk assessment, these are:

- On-site impacts.
- The site impacting its surroundings.
- Off-site sources impacting the subject site.

4.2 Potential Contaminative Sources

On-Site
From the information obtained, the following sources have been identified which may affect the redevelopment of the site for commercial end use:

- Made ground associated with the former developments.
- Ground gas from possible Alluvium (River Mud on BGS Log).

Off-Site
The following off-site sources have been identified which may affect the redevelopment of the site:

- Arcadia Tabaco Works / Post Office
- Railway (Sidings)
- Electricity substation (closest 62m East)

Associated Contaminants
The contaminants commonly associated with the potential sources of contamination identified are tabulated below:

Contaminative Sources	Department of the Environment Industry Profile or Other Source	Commonly Associated Contaminants
On Site		
Made Ground	-	Heavy metals, polycyclic aromatic hydrocarbons (PAHs), asbestos, ground gases (carbon dioxide and methane).
Alluvium	CIRIA C665	Typical concentrations of methane 0-5% and carbon dioxide 0-10%.

Off Site		
Arcadia Tabaco Works / Post Office	Refining and finishing works	Heavy metals, ash, hydrocarbons, PAHs and asbestos.
Electricity Substation	Electrical Works	Poly Chlorinated Biphenyls (PCBs) and oil.
Railway (Sidings)	Railway land	Heavy metals, TPH, PCBs and asbestos.

4.3 Pathways

A pathway is defined as a medium by which a contaminant comes into contact with, or otherwise impacts a receptor.

At this stage the potential contaminants identified above are considered to present potential risks to site end users and controlled waters through the following pathways:

Potential Pathways	
Pathways in respect to Human Health	• Ingestion of contaminated soils. • Dermal contact with contamination. • Inhalation of dusts. • Inhalation of gases or vapours in both indoor and outdoor air.
Pathways in respect to Controlled Waters – Surface water	• Surface run-off /over land flow. • Drainage discharge. • Base flow from groundwater.
Pathways in respect to Controlled Waters – Groundwater	• Leaching of mobile contamination into groundwater via the unsaturated zone. • Migration of perched groundwater in any permeable soils or along existing or proposed service runs. • Migration into the saturated zone and flow through the aquifers underlying the site.
Pathways in respect to Property/structures/water pipes	• Direct contact with substances deleterious to building materials and potable water supply pipelines. • Migration of ground gases (methane and carbon dioxide) into confined spaces (explosion and damage to property).

4.4 Receptors

The identified receptors are listed below:

- Residential End Users (human health).
- Structures/Property/Potable water supply pipes.
- Nearest watercourse. Regent's Canal, 740m East (Controlled waters).
- Bedrock Aquifer. Unproductive/London Clay Formation (Controlled waters).

Under current UK health and safety legislation, employers are required to carry out their own appropriate site-specific risk assessments and mitigation to protect employees. It has been assumed that any future construction works onsite will be undertaken in compliance with these requirements. Therefore, construction workers have not been specifically considered as part of this assessment.

4.5 Preliminary Conceptual Site Model (CSM)

The information obtained in the previous sections has been used to compile a Preliminary CSM. The identified potential contaminants and receptors have been assessed in the table below as to whether a plausible source-pathway-receptor pollutant linkage for the proposed end use of the site exists. The risk classification has been estimated in accordance with information in the Guidance and Methodology in Appendix A.

The Preliminary CSM's are presented in the tables overleaf, any assessed risk above moderate will possibly require further action:

Human Health						
Potential Source	**Potential Pathway**	**Potential Receptor**	**Likelihood**	**Severity**	**Level of Risk**	**Justification**
On site Made Ground Metals, PAH's, asbestos	Root uptake, ingestion, direct contact, inhalation of dusts	End-users	Negligible	Medium	No Linkage	It is possible these contaminants are present within the made ground from the historic development which present a moderate risk to end users of a residential development. However, the presence of hardstanding across the residential development will break the pathway to site end users.
On site Made Ground Metals and organic contamination	Migration into/chemical attack of water supply pipelines	Water Pipelines / End users	Low likelyhood	Medium	Moderate / Low	Contaminants within the soil/groundwater could potentially attack the clean potable water supply pipe, contaminants should be assessed to determine the correct pipe material.
On site Made ground Ground Gas (carbon dioxide and methane)	Migration into confined spaces, inhalation and asphyxiation/ explosion	End-users / property / structures	Unlikely	Severe	Moderate / Low	Made ground is likely to be present up to 3m under the site due to the inferred presence of historic basements. Made ground in this instance is likely to have a very low gas generation potential, as the latest development occurred circa 60 years ago with exception of the car park present. This is not considered to represent a significant ground gas source, and therefore gas monitoring is not required. To verify the gas protection measures, it would be sufficient to assess the ground conditions and test the made ground total organic content in accordance with RB17 and determine what, if any, superficial deposits are present underneath the site. Risks are therefore considered to be low to moderate at this stage.
On site Natural Geology - Alluvium Ground Gas	Migration into confined spaces, inhalation and asphyxiation/ explosion	End-users / property / structures	Low likelihood	Severe	Moderate	The BGS logs suggest the possible presence of alluvium beneath the site ('River Mud'). Alluvium is an organic rich sediment which has typical concentrations of gas which can potentially require gas protection measures. The risk is considered to be moderate, although further investigation is required to quantify the presence of risk or gas protection measures in line with CS3 should be installed within the development as per CL:AIRE RB17.
Off site Electricity Substation PCBs	Ingestion, direct contact, inhalation of dusts	End-users	Unlikely	Medium	Low	Due to the age of the substation, which appears to have been constructed between 1971 and 1972, these pre-dates the ban on PCB's imposed in 1986, therefore, a potential source. However, PCBs were typically used in very low volumes with regular maintenance regimes carried out which would identify any significant leaks or spillages of this contaminant. In addition, PCBs are relatively immobile and are unlikely to have migrated away from the substation. The overall risk is considered to be low.

Off site Made ground associated with Tobacco Works and Post Office Metals, PAH's, asbestos	Root uptake, ingestion, direct contact, inhalation of dusts	End-users	Unlikely	Medium	Low	It is possible that contaminants (namely metals and PAHs) associated with the off-site made ground sources could leach to the underlying aquifer and effect the subject site. However, given the lack of recorded superficial deposits and the underlying London Clay Formation, any base flow would be minimal, and therefore considered unlikely. The risk is considered to be low.
Off site Made Ground associated with Tobacco Works and Post Office Metals and organic contamination	Migration into/chemical attack of water supply pipelines	Water Pipelines / End users	Unlikely	Medium	Low	Contaminants within the soil/groundwater could potentially attack the clean potable water supply pipe. However, due to the low permeability nature of the underlying London Clay, and no recorded superficial, it is unlikely contaminants will be able to migrate and so the risk is assessed as low.
Off site Made ground associated with Tobacco Works and Post Office Ground Gas (carbon dioxide and methane)	Migration into confined spaces, inhalation and asphyxiation/ explosion	End-users / property / structures	Unlikely	Medium to Severe	Low	The tobacco works does not appear to have undergone many iterations of development, however the thickness of made ground in surrounding areas is unknown. Additionally, with the lack of superficial deposits and underlying cohesive bedrock, there does not appear to be a defined pathway for migration to affect the subject site.

Controlled Waters						
Potential Source	**Potential Pathway**	**Potential Receptor**	**Likelihood**	**Severity**	**Level of Risk**	**Justification**
Made Ground PAH's, Metals	Overland flow, / migration through saturated zone	Regent's Canal (Surface waters)	Unlikely	Medium	Low	It is considered contaminants associated with the made ground and other past industrial uses are unlikely to impact the Canal. This is due to the low permeability of the clays underlying the area, which will inhibit lateral migration, and the potential for contaminants to attenuate and degrade over this distance. Additionally, canals are considered closed systems as they are lined are not supported by groundwater base flow. Therefore, a low risk is posed to the canal from the made ground.
	Leaching through unsaturated zone / Migration through saturated zone	Unproductive Aquifer (Ground-water)	Low Likelihood	Medium	Low	The site is currently surfaced in hardstanding and will remain so, with a new surface water drainage system installed which will further reduce the risk to controlled waters. By virtue of the development taking place, this should contribute to an overall "betterment" of groundwater quality.
	Migration through saturated zone	Unproductive Aquifer (Ground-water)	Unlikely	Medium	Low	There are no groundwater abstraction licences or Source Protection Zones near the site. As stated above, the site is currently surfaced in hardstanding and will remain so, with a new surface water drainage system installed which will further reduce the risk to controlled waters.

Human Health Risk – Soils Contamination Summary
Based on the preliminary CSM and the current use of the site, the overall risk from land contamination at the site is considered to be **low to moderate** for a redeveloped site. This would need to be confirmed by appropriate intrusive investigation, testing and assessment.

Human Health Risk – Ground Gas Summary
Based on the information gathered, it should be assumed that made ground and alluvial deposits are potentially present. The alluvium in particular can present a significant source. Aside from the likely presence of made ground and potential alluvial deposits, there are no other viable sources of permanent ground gases, at this stage gas monitoring is therefore recommended. Should ground conditions differ significantly then then this assessment should be revised.

Controlled Waters Risk - Summary
Based on the preliminary CSM, renaissance believes the overall risk to controlled waters at the site is low.

5.0 PRELIMINARY GEOTECHNICAL ASSESSMENT

5.1 Hazard Identification

A preliminary geotechnical hazard identification exercise has been undertaken in general accordance with the Highways England document CD 622, 'Managing geotechnical risk'. Potential geotechnical hazards based on the expected ground conditions are listed below:

- Made ground of unknown nature; if placed in a non-engineered manner may cause excessive settlement of foundations, highways and infrastructure.
- Low strength, compressible ground (soft alluvial organic clays); may cause excessive settlement of foundations, highways and infrastructure.
- Presence of basements in the ground from historical developments (e.g underground railway) causing difficulties with excavations or penetrative works (e.g. piling).
- Shrink / swell of clay; settlement / heave of foundations and floor slabs when located within the influence of trees and vegetation.
- UXO; the site lies within an area at high risk from unexploded ordnance.

5.2 Foundation and Geotechnical Design

The proposed development will comprise five-storey apartment block with basement and associated infrastructure. The type of foundation solution should be informed by an onsite intrusive investigation to confirm ground conditions and obtain geotechnical parameters for preliminary foundation and floor slab design. Intrusive investigation should also obtain data to allow appropriate concrete classification in accordance with BRE SD1 and for preliminary highways/pavement design.

The proposed development will comprise a five-storey apartment block. In light of the likely imposed loads and potentially high shrink swell capacity of the underlying strata, it is likely that a deep foundation solution, such as piles or vibro stone columns, will be required. However, the exact type of foundation solution should be informed by an onsite intrusive investigation to the confirm ground conditions.

5.3 Sustainable Drainage Systems (SuDS)

Given the site is underlain by low permeability clays, it is unlikely that drainage to SuDS such as traditional soakaways will be suitable.

This would need to be confirmed by an onsite intrusive investigation to confirm ground conditions and infiltration rates. Testing should be carried out in general accordance with BRE Digest 365 “Soakaway design” and CIRIA C753 “The SuDS Manual”.

6.0 OTHER DEVELOPMENT CONSTRAINTS

6.1 Constraint Identification

It is noted that there are no buildings present on site..If asbestos is present in soils, these will need to be dealt with in accordance with the Control of Asbestos Regulations (CAR) 2012.

No invasive species have been noted during the walkover, however it would be prudent to undertake a specialist survey prior to any works on site.

Notwithstanding any site observations concerning archaeological or ecological features, this report does not constitute a formal survey of these potential issues and specialist advice should be sought.

The preliminary risk assessment undertaken within this Phase I Assessment may identify potential risks to site demolition and construction workers. However, full consideration of occupational health and safety issues is beyond the scope of this report, with employers required to carry out their own site-specific risk assessments and mitigation as appropriate.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Geo-Environmental Summary

The site has had minimal previous uses, recorded as residential buildings and a carpark. Based on the proposed residential development without soft landscaping, the overall risk to end-user human health from on-site soils is considered to be negligible.

The risk from off-site sources of contamination is considered to be low.

The risk from permanent ground gases is considered to be low to moderate.

The overall risk to controlled waters is considered to be low.

Intrusive investigations will be required to confirm the above assessed levels of risks and determine remedial requirements, if any.

7.2 Geotechnical Summary

Intrusive investigations will be required to confirm the most suitable foundation solution and to obtain parameters for concrete classification, floor slab and highways design.

Drainage to SuDS is unlikely to be a viable option for the site, due to indicated ground conditions and available space. If required confirmatory percolation testing is recommended to confirm design requirements.

Consideration of a potential underground electric railway station (see pg 14 of Groundsure report) / tracks or infrastructure under the site must be taken into account and may change the choice of appropriate foundations. The average depth of the London Underground system is 24m. However, the infrastructure associated may extend closer to the surface, such as venting systems, electrical supplies, etc. Obtaining appropriate of plans of the underground system in proximity of the site is advised before further consideration of foundation types.

7.3 Further Work

To confirm the risks to the identified receptors and confirm the ground conditions in respect to the identified geotechnical and geo-environmental risks, an appropriate intrusive investigation will need to be undertaken. The following further works are recommended, although this list is not exhaustive and should be read in conjunction with any planning conditions that are applicable to the site:

- Topographical survey / utility mapping.
- Obtain Detailed UXO Desk Study.
- Intrusive ground investigation comprising:
  - Windowless sampling and cable percussive drilling
  - Installation of standpipes in boreholes to allow gas concentrations and groundwater levels to be monitored.
  - Geotechnical testing of soils and rock
  - Contamination analyses of soil and groundwater
- Assessment and recommendations based on the above, including requirements for further work, if necessary.

8.0 ABBREVIATIONS AND DEFINITIONS

GLOSSARY	
Term / Abbreviation	**Definition**
AST	Above Ground Storage Tank.
B(a)P	Benzo (a) Pyrene.
BGS	British Geological Survey.
BRE	Building Research Establishment.
BS	British Standard.
BSL	Brownfield Solutions Ltd.
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes.
CBR	California Bearing Ratio (used in pavement/highways design).
CAR 2012	Control of Asbestos Regulations (2012).
CBCB	Cheshire Brine Compensation Board.
CBCD	Cheshire Brine Compensation District.
CBR	California Bearing Ratio.
CIEH	Chartered Institute of Environmental Health.
CIRIA	Construction Industry Research Association.
CL:AIRE	Contaminated Land: Applications in Real Environments.
CLEA	Contaminated Land Exposure Assessment.
CLO	Contaminated Land Officer.
COMAH	Control of Major Accident Hazards.
Contamination	Presence of a substance which is in, on or under land, and which has the potential to cause significant harm or to cause significant pollution of controlled water. There is no assumption in this definition that harm results from the presence of the contamination. Naturally enhanced concentrations of harmful substances can fall within this definition of contamination. Contamination may relate to soils, surface water, groundwater or ground gas.
Controlled Waters	Inland freshwater (any lake, pond or watercourse above the freshwater limit), water contained in underground strata and any coastal water between the limit of highest tide or the freshwater line to the three-mile limit of territorial waters.
CPT	Cone Penetration Test.
CSM	Conceptual Site Model. A schematic hypothesis of the nature and sources of contamination, potential migration pathways (including description of the ground and groundwater) and potential receptors, developed on the basis of the information from the preliminary investigation and refined during subsequent phases of investigation and which is an essential part of the risk assessment process. The conceptual site model is initially derived from the information obtained by the preliminary investigation (i.e. the Phase I Phase I Assessment). This conceptual model is used to focus subsequent investigations, where these are considered to be necessary, in order to meet the objectives of the investigations and the risk assessment. The results of intrusive investigations can provide additional data that can be used to further refine the conceptual site model.
DCP	Dynamic Cone Penetrometer.
DNAPL	Dense Non-Aqueous Phase Liquid.
DoWCoP	Definition of Waste Code of Practice.
DWS	Drinking Water Standard.
EA	Environment Agency.
EHO	Environmental health Officer.
EQS	Environmental Quality Standard.
GAC	Generic Assessment Criteria.
GDR	Geotechnical Design Report.
GFR	Geotechnical Feedback Report.
GIR	Ground Investigation Report.
GSV	Gas Screening Value.

Harm	Adverse effect on the health of living organisms, or other interference with ecological systems of which they form part, and, in the case of human health, including property/structures and water supply pipelines.
Hazard	Inherently dangerous quality of a substance, procedure or event.
HDPE	High Density Polyethylene.
HSV	Hand Shear Vane.
K	Modulus of Subgrade Reaction.
LCRM	Land Contamination: Risk Management (EA guidance).
LNAPL	Light Non-Aqueous Phase Liquid (petrol, diesel, kerosene).
LOD	Limit of Detection (for particular method adopted).
MMP	Materials Management Plan.
Mv	Modulus of Volume of Compressibility.
ND	Not Detected.
NHBC	National House Building Council.
NR	Not Recorded.
OS	Ordnance Survey.
PAH	Polycyclic Aromatic Hydrocarbon.
Pathway	Mechanism or route by which a contaminant comes into contact with, or otherwise affects, a receptor.
PCB	Poly-Chlorinated Biphenyl.
PCSM	Preliminary Conceptual Site Model.
pH	Scale used to specify how acidic or basic a water-based solution is.
PHC	Petroleum Hydrocarbons.
PID	Photo Ionisation Detector.
PNEC	Predicted No-Effect Concentration.
Precision	Level of agreement within a series of measurements of a parameter.
PSD	Particle Size Distribution.
PVC	Polyvinyl Chloride.
Receptor	Human health, living organisms, ecological systems, controlled waters (surface waters and groundwater within aquifers), atmosphere, structures and utilities that could potentially be adversely affected by contaminant(s).
Risk	Probability of the occurrence, magnitude and consequences of an unwanted adverse effect on a receptor.
Risk Assessment	Process of establishing, to the extent possible, the existence, nature and significance of risk.
Sampling	Methods and techniques used to obtain a representative sample of the material under investigation.
SOM	Soil Organic Matter.
Source	Location from which contamination is, or was, derived. This could possibly be the location of the highest soil, groundwater or gas concentration of the contaminant(s).
SPT	Standard Penetration Test.
SVOCs	Semi Volatile Organic Compounds.
TOC	Total Organic Carbon.
TPH CWG	Total Petroleum Hydrocarbon (Criteria Working Group).
TVOCs	Total volatile organic compounds.
UCS	Unconfined Compressive Strength.
Uncertainty	Parameter, associated with the result of a measurement that characterises the dispersion of the values that could reasonably be attributed to the measurement.
UST	Underground Storage Tank.
UXO	Unexploded Ordnance.
VCCs	Vibro Concrete Columns.
VSCs	Vibro Stone Columns
VOCs	Volatile Organic Compounds.
WAC	Waste Assessment Criteria.
WFD (in waste context)	Waste Framework Directive.
WFD (in water context)	Water Framework Directive.

Units	Definition
°	Degrees
Φ	Phi angle (in degrees)
g/l	Grams per Litre
Km	Kilometres
kPa	Kilo Pascal (Equivalent to kN/m^2)
$KN/m^2/mm$	Kilo Newton per metered squared per millimeter
kN/m^2	Kilo Newtons per metre squared
kPa	Kilo Pascal (Equivalent to kN/m^2)
l/hr	Litres per hour
MJ/kg	Mega joule per kilogram
MN	Mega Newton
M^2/MN	Mega Newton per metre squared
M	Metres
m bgl	Metres Below Ground Level
m OD	Metres Ordnance Datum (sea level)
µg/l	Micrograms per Litre (parts per billion)
µm	Micrometre
mb	Millibars (atmospheric pressure)
mg/kg	Milligrams per kilogram (parts per million)
mg/m^3	Milligram per metre cubed
mm	Millimetre
ppb	Parts Per Billion
Ppm	Parts Per Million

9.0 REFERENCES

BS 5930+A1:2020: 'Code of Practice for Site Investigations'. 2020.

BS 10175:2011+A2:2017 'Investigation of Potentially Contaminated sites - code of practice'. 2017.

BRE Report BR211, Scivyer, C. 'Radon – Guidance on protective measures for new buildings' 2015 Edition.

CIRIA C665 'Assessing Risks Posed by Hazardous Ground Gases to Buildings'. 2007.

CIRIA C681 'Unexploded Ordnance (UXO) A guide for the construction industry'. 2009.

CIRIA C753 'The SuDS Manual'. 2015.

CL:AIRE RB17 'A Pragmatic Approach to Ground Gas Risk Assessment'. 2012.

Department of the Environment. 'Industry Profiles' - 48 separate publications available from The Stationery Office, London. 1995.

DEFRA and the Environment Agency, CLR Report No 11 'Model Procedures for the Management of Contaminated Land'. 2004. [Withdrawn 2019.]

Environment Agency (EA) - Land Contamination Risk Management (LCRM). 2019.

Health and Safety Executive (HSE). Control of Asbestos Regulations (CAR). 2012.

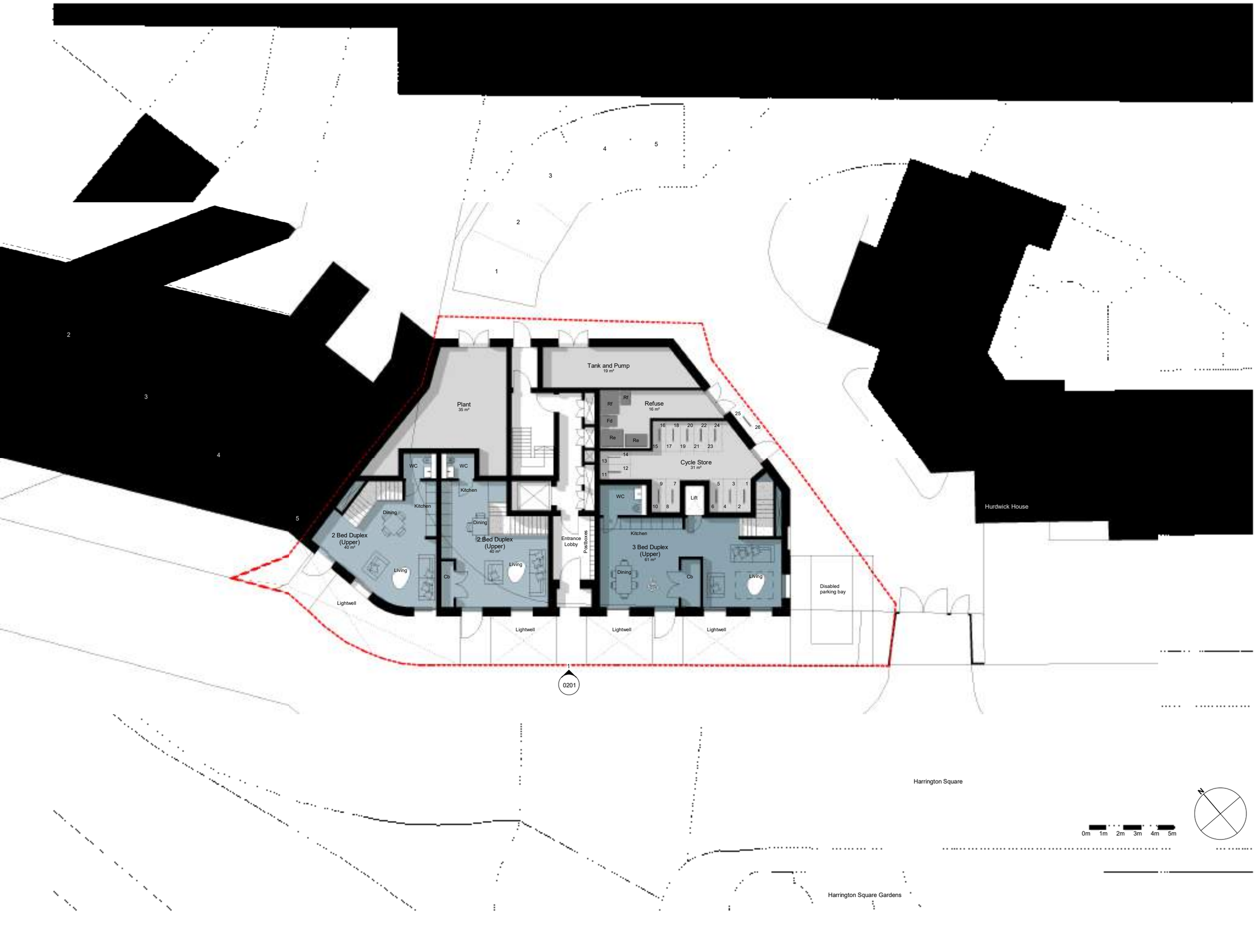
Highways England. CD 622, 'Managing geotechnical risk'. 2020.

National Planning Policy Framework (NPPF). 2021.

National Planning Policy Framework - Technical Guidance. March 2012.

Water Framework Directive, 2000.

DRAWINGS



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NOTES:

Rev	Description	Date	By

PLANNING

Client
Salboy

Project
Harrington Square

Title
Ground Floor Plan

Status

Project number
0010

Date
19/10/22

Drawn by
JB

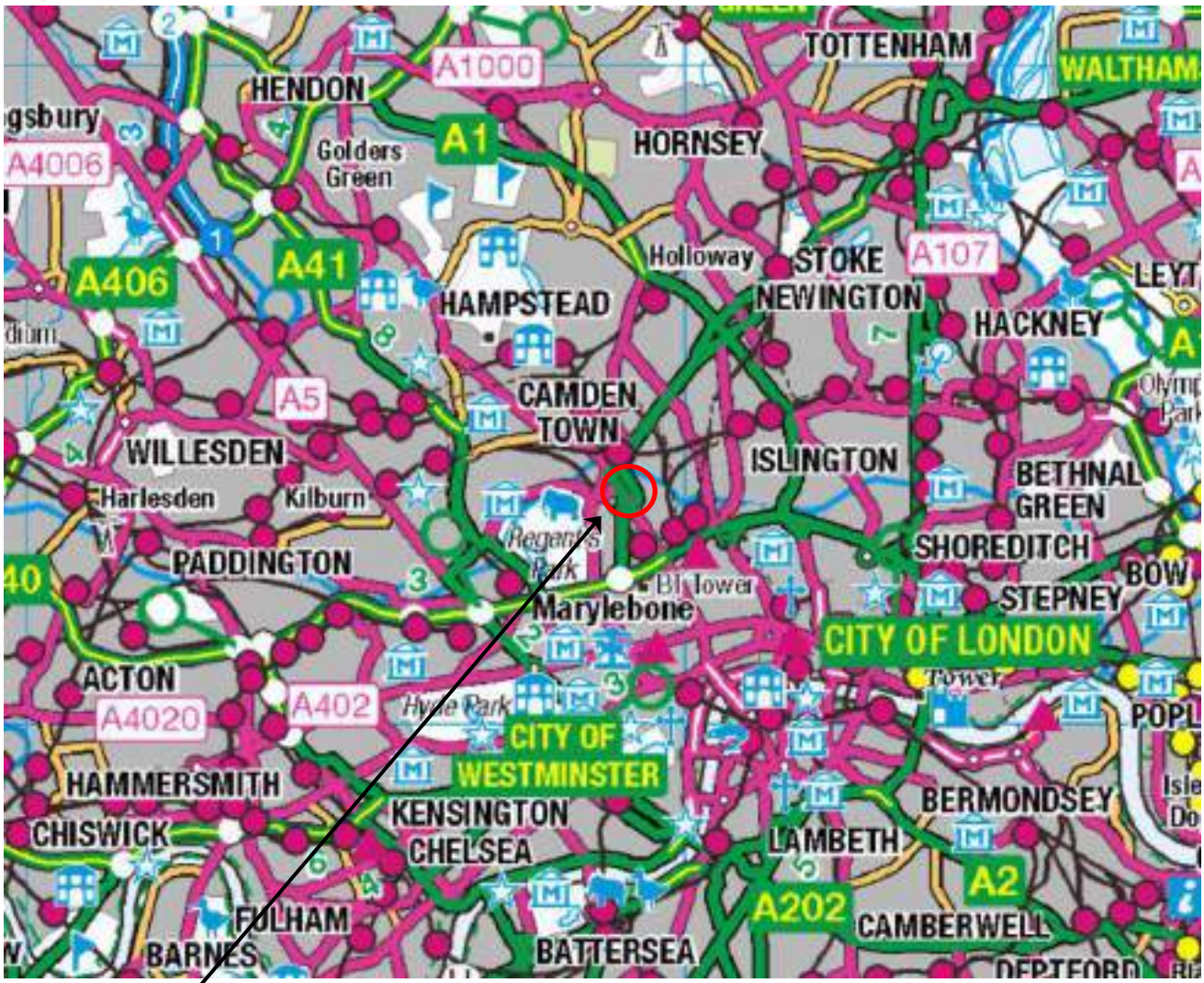
Checked by
SP

Scale
1 : 100@A1

Revision

Drawing No.
0010-0301

08/12/2022 12:51:44



SITE LOCATION

NEAREST POSTCODE: NW1 2JE

SITE ENTRANCE WHAT3WORDS: ///DEAL.LEAGUE.CABIN

REV	DATE	DESCRIPTION	BY	CKD

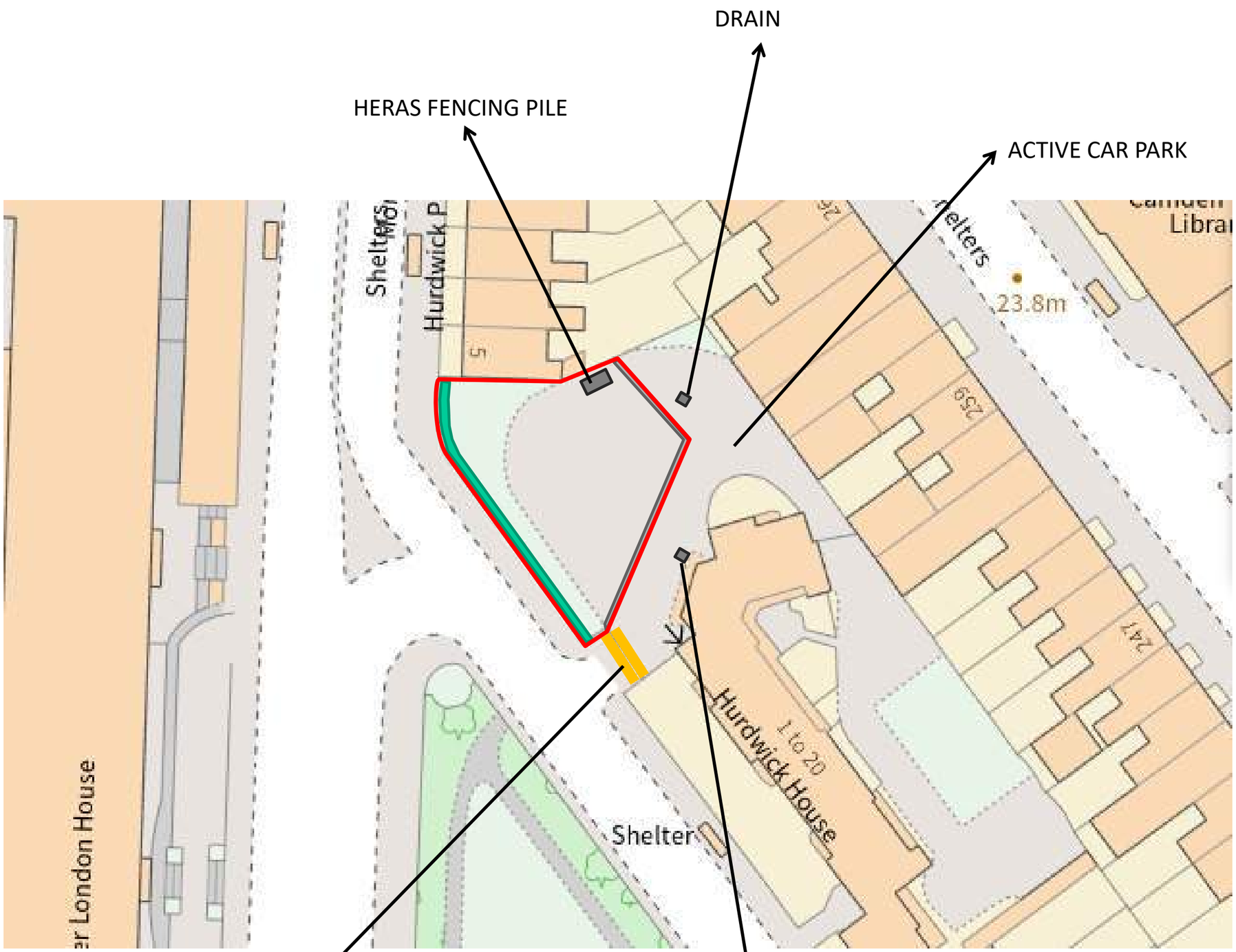
CLIENT: SALBOY

PROJECT TITLE: HARRINGTON SQUARE, CAMDEN, LONDON

DRAWING TITLE: SITE LOCATION PLAN

DRAWING No.	REVISION	SCALE	DATE
C5331/01	-	NTS	13/02/23

DRAWN BY	CHECKED BY
SD	XXX



KEY

- APPROXIMATE SITE BOUNDARY
- GATE
- SOFT LANDSCAPING
- HEDGES
- HERAS FENCING

NOTES

1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCING WORKS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT & ENGINEER FOR VERIFICATION. FIGURED DIMENSIONS ONLY ARE TO BE TAKEN FROM THIS DRAWING.
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REV	DATE	DESCRIPTION	BY	CKD

CLIENT
SALBOY

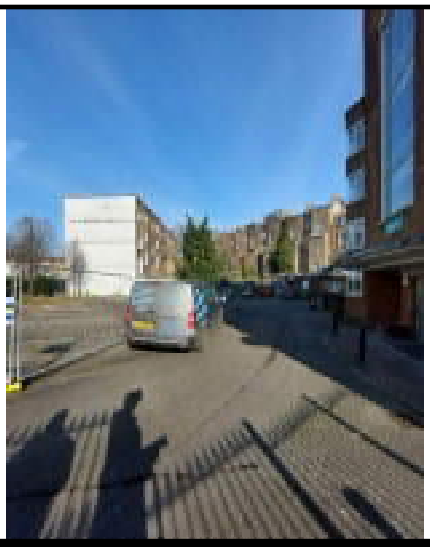
PROJECT TITLE
HARRINGTON SQUARE, CAMDEN, LONDON

DRAWING TITLE
SITE FEATURES PLAN

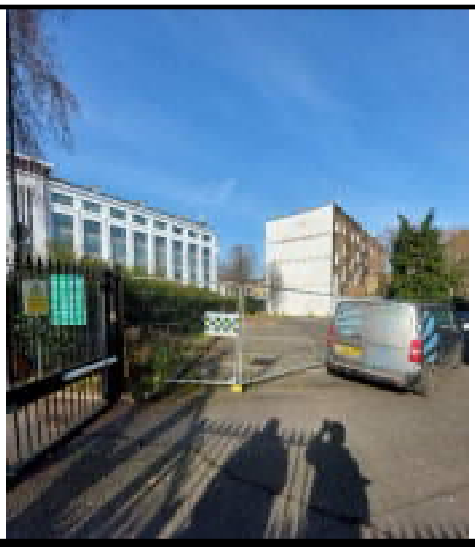
DRAWING No.	REVISION	SCALE	DATE
C5331/02	-	NTS	21/02/23

DRAWN BY	CHECKED BY
HW	DMG

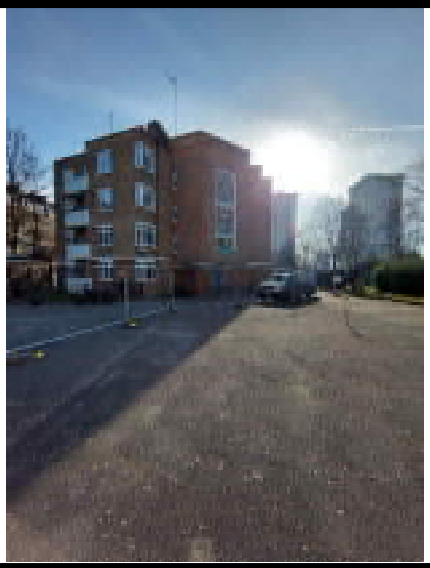
PHOTOGRAPHS



Photograph 1: Site Access

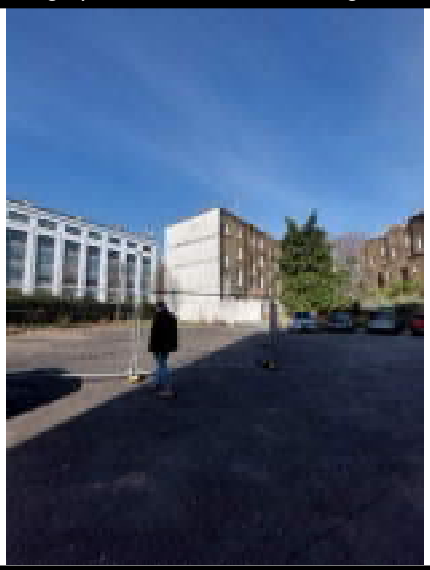


Photograph 2: Site Entrance

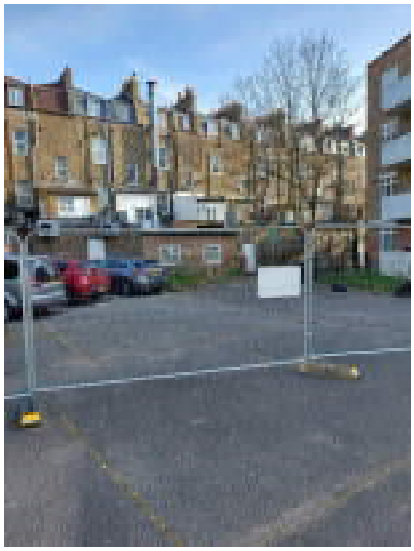


Photograph 3: Site Overview facing South

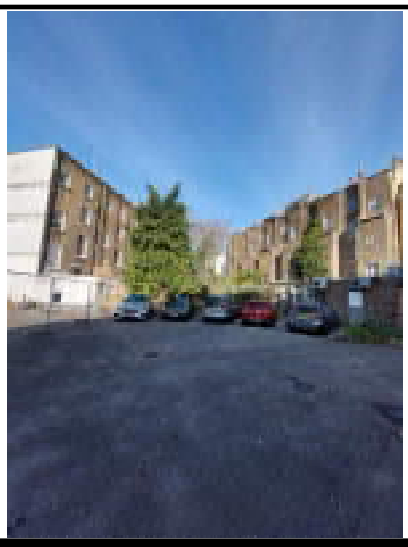
Photograph 4: Site overview facing East



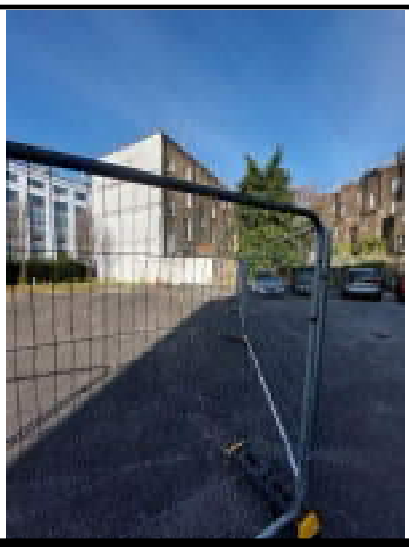
Photograph 5: Site Overview facing North



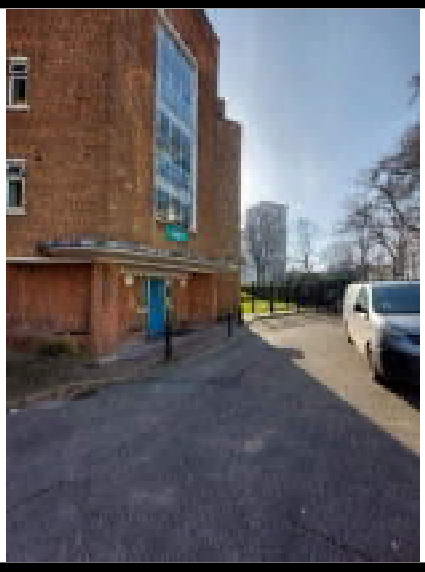
Photograph 6: Site Overview facing West



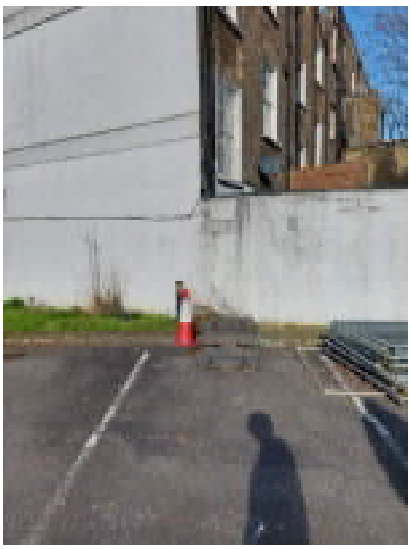
Photograph 7: Carpark in current use adjacent to site



Photograph 8: Harris Fencing south boundary



Photograph 9: Adjacent apartments to south



Photograph 10: Apartments adjacent to site in Northeast

Photograph 11: Pile of additional fencing

Photograph 12: Presence of trees onsite

APPENDIX A
Methodology and Guidance

Phase I Geo-Environmental Assessment Reports - Methodology and Guidance

This Appendix provides information on the approaches, methods and guidance used by Brownfield Solutions Ltd in the preparation of this report.

The term 'geo-environmental' is used to describe aspects relating to ground-related environmental issues (such as potential soils and groundwater contamination). The term 'geotechnical' is used to describe aspects relating to the physical nature of the site (such as foundation requirements). It should be noted that this is an integrated investigation and these two main aspects are related, unless otherwise specified within the report.

Phase I reports are written in general accordance with the description of a Preliminary Investigation as defined in BS10175:2011+A2:2017 and are also produced in general accordance with the recommendations for a Tier 1 Preliminary Risk Assessment as described in LCRM guidance

The first stage of the investigation and assessment of a site is the Preliminary Investigation/Tier 1 Preliminary Risk Assessment, often referred to as a Phase 1 Desk Study, comprising a desk study and walk-over survey and collation of desk-based searches, which culminates in the Preliminary Risk Assessment and the development of a preliminary/initial Conceptual Site Model (CSM). From this are identified any potential geotechnical and geo-environmental hazards and the qualitative degree of risk associated with them.

From the geo-environmental perspective, the hazard Identification process uses professional judgement to evaluate all the hazards in terms of possible contaminant linkages (of source-pathway-receptor). Possible contaminant linkages are potentially unacceptable risks in terms of the current contaminated land regime legal framework and require either remediation or further assessment. These are normally addressed via intrusive ground investigation and generic risk assessment as part of Phase II investigations and reports.

Contaminated Land - Legislative Background

Land contamination can be addressed in several ways, e.g. during planning, under Part 2A, following an incident, during an investigation into environmental damages, or during the application of an environmental permit, or its surrender.

For the planning process the key test is **as a minimum the site cannot be determined as contaminated land**, e.g. there is not significant harm, significant possibility of significant harm to human health or that there is not significant harm to, or the significant possibility that the pollution of controlled waters will occur.

Environmental liabilities and risks have been evaluated in terms of a source -pathway - target relationship in accordance with the approach set out in:

- The 1995 Environment Act.
- The Contaminated Land Statutory Guidance, DEFRA – April 2012.
- The Contaminated Land (England) Regulations 2006.
- The Contaminated Land (England) Amendment Regulations 2012.
- Water Resources Act.
- Water Framework Directive.
- Environmental Damage Regulations.
- Environment Agency (EA) - Land Contamination Risk Management (LCRM) 2019.

Contaminated land is defined within the legislative framework as land which is in such condition by reason of substances in, on or under the land that:

1) Significant harm is being caused or there is a significant possibility of such harm being caused.
2) Significant pollution of controlled waters is being or is likely to be caused.

The potential for harm is based on the presence of three factors:

Source - substances that are potential contaminants or pollutants that may cause harm.
Pathway - a potential route by which contaminants can move from the source to the receptor , and the impact of that migration on the source e.g. ;attenuation.
Receptor - a receptor that may be harmed, for example the water environment, humans and water, considering the sensitivity of the receptor

Where a source, pathway and target are all present a pollutant linkage exists and there is potential for harm to be caused. The presence of a source does not automatically imply that a contamination problem exists, since contamination must be defined in terms of pollutant linkages and unacceptable risk of harm. The nature and importance of both pathways and receptors are site specific and will vary according to the intended end use of the site, its characteristics and its surroundings.

The key principle which supports the SPR approach is ‘suitable for use’ criteria. This requires remedial action only where contamination is considered to pose unacceptable actual or potential risks to health or the environment and, taking into account the proposed use of the site.

Relevant Guidance Documents
This report has been prepared in accordance with the list of guidance below, however the list is not exhaustive:

- DETR: Circular 02/2000: Environmental Protection Act 1990: Part IIA: Contaminated land. 2012.
- Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the EPA1990, May 2002.
- BS 10175:2011+A2:2017.
- Environment Agency (EA) - Land Contamination Risk Management (LCRM). 2019.

- Groundwater Protection - https://www.gov.uk/government/collections/groundwater-protection.
- UK Technical Advisory Group (UKTAG) - - Water Framework Directive
- Incidents and their classification: the Common Incident Classification Scheme (CICS) – Used by the Environment Agency to classify pollution incidents.

Relevant Legislative Documents
The following is a non-exhaustive list of legislative framework documents that has been considered in the production of this report:

- The Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance (2012).
- The Environment Protection Act (1990).
- The Water Resources Act (1991).
- The Environment Act (1995).
- The Contaminated Land (England) Act (2000).
- The Pollution Prevention and Control (England and Wales) Regulations (2000).
- The Landfill Regulations (England and Wales) Regulations (2002).
- The Landfill (England and Wales) (Amendment) Regulations (2004).
- Contaminated Land (England) Regulations (2012).
- The Environmental Damage (Prevention and Remediation) Regulations (2009).
- Environmental Permitting Regulations (England and Wales) Regulations (2010).
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017
- Health and Safety at Work Act.
- National Planning Policy Framework (NPPF)(2021).

Contaminated Land Risk Assessment Approach

Contaminated Land Risk Assessment is a technique that identifies and considers the associated risk, determines whether the risks are significant and whether action needs to be taken. The four main stages of risk assessment are:

Hazard Identification ➡ Hazard Assessment ➡ Risk Estimation ➡ Risk Evaluation.

LCRM outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. The starting point of the risk assessment is to identify the context of the problem and the objectives of the process. Under LCRM, three tiers of risk assessment exist – Stage/Tier Preliminary Risk Assessment, Stage 2 Generic Quantitative and Stage 3 Detailed Quantitative.

Further information can be found at the below site:
https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm

Formulating and developing a conceptual model for the site is an important requirement of risk assessment, this supports the identification and assessment of pollutant linkages. Development of the conceptual model forms the main part of preliminary risk assessment, and the model is subsequently refined or revised as more information and understanding is obtained through the risk assessment process.

Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk.

The risk assessment process needs to take into account the degree of confidence required in decisions. Identification of uncertainties is an essential step in risk assessment.

The likelihood of an event is classified on a four-point system using the following terms and definitions from CIRIA C552, with reference to Incidents and their classification: the Common Incident Classification Scheme

(CICS), Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance 2012 and other guidance as appropriate which will be detailed within the main body of the report if applied.

The likelihood of a given receptor being impacted is related to a number of factors, e.g. the geology which could inhibit contaminant migration. For example, a site with a significant thickness of clay between it and a receptor may reduce migration of contamination via the subsurface, which will reduce the likelihood of a given receptor being impacted. The geology or drainage for example could offer a preferential pathway e.g. mines shafts/faults increasing the likelihood and potential magnitude of an impact. The depth of contamination will also affect the exposure pathway, for example petroleum hydrocarbons at depth are unlikely to reach a receptor via dermal contact but could via vapour pathways which will influence the likelihood of an impact being felt e.g. if there are no buildings on site.

The terms and definitions used for the assessment of the likelihood are provided below:

High likelihood: There is a pollution linkage and an event appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Examples - Extensive areas with concentrations above saturation limits for mobile contamination e.g. petroleum hydrocarbons within the water table.

Likely: There is a pollution linkage and all the elements are present and in the right place, which means it is probable that an event will occur. Circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term.
Examples – Localised areas of contaminants with concentrations above saturation limits for mobile contamination e.g. localised petroleum hydrocarbons within the water table; shallow contamination above relevant human health generic assessment criteria is present with little or no hardstanding,

Low likelihood: There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain even over a longer period such event would take place, and is less likely in the short term.
Examples - A thickness/distance of low permeability deposits preventing contaminant migration to a receptor is present; a site is mostly covered hard standing preventing exposure to soil contamination.

Unlikely: There is a pollution linkage but circumstances are such that it is improbable the event would occur even in the long term.
Examples – A site is underlain by a substantial thickness of low permeability clays, between the source and potential receptors which will inhibit significantly, but not completely rule out migration to sensitive receptors.

The severity is also classified using a system based on CIRIA C552, with reference to Incidents and their classification: the Common Incident Classification Scheme (CICS), Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance 2012 and other guidance as appropriate which will be detailed within the main body of the report, if applied. The terms and definitions are:

Severe: Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. A short-term risk to a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples – High concentrations of contaminant on surface of recreation area, major spillage of contaminants from site into controlled waters, explosion causing building to collapse.

Medium: Chronic damage to human health ('significant harm' as defined in DETR 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples - Concentrations of contaminants exceed the generic assessment criteria, leaching of contaminants from a site to a Principal or Secondary Aquifer, death of species within a designated nature reserve.

Mild: Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures, services or the environment.
Examples – Pollution of non-classified groundwater or damage to buildings rendering it unsafe to occupy.

Minor: harm, not necessarily significant harm, which may result in financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by use of personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.
Examples – Presence of contaminants at such concentrations PPE is required during site work, loss of plants in landscaping scheme or discolouration of concrete.

Once the likelihood and severity have been determined, a risk category can be assigned using the table below.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very Low	Very low
	No Linkage	Negligible			

Definitions of the risk categories obtained from the above table are as follows together with an assessment of the further work that might be required:

Very high: There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability. Urgent investigation and remediation are likely to be required.

High: Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required and remedial works may be necessary in the short term and are likely over the longer term.

Moderate: It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it would be more likely to be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term.

Low: It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.

Very Low: There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

Some linkages may be identified which constitutes a theoretical connection between a source and a receptor, but professional judgement shows them not to be possible for some reason. These are labelled 'no linkage' in the summary table, which give rise to a **negligible** risk category and no further action is required.

Ground Gas Risk Assessment Guidance

BS8485:2015+A1:2019, BS 8576:2013, CIRIA C665 and CL:AIRE RB17 are the current guidance which gives up-to-date advice on all aspects of ground gas. They outline good practice in investigation, the collection of relevant data and monitoring programmes in a risk-based approach to ground gas contamination.

Within BS8485:2015+A1:2019, BS 8576:2013 and CIRIA C665, two semi-quantitative methods are set out for the assessment of risk:

1 For low rise housing with a ventilated under floor void at minimum 150 mm (Boyle and Witherington).
2 For all other development types (Wilson and Card).

Both methods use the concept of Gas Screening Values (GSVs) to identify levels of risk. The mitigation and management of potentially unacceptable risk is described with reference to both passive and active systems of gas. Source removal is also discussed as an option. A sperate approach is discussed under the RB17 header further below.

The aim of the guidance is for a consistent approach to decision making, particularly relating to the scope of protective design measures on a site-specific basis.

Legislative Framework
BS8485:2015+A1:2019, BS 8576:2013 and CIRIA C665 provides technical guidance, however they also recognise the context into which the guidance has to be employed. Government policy is based upon a "suitable for use approach", which is relevant to both the current and proposed future use of land. When considering the current use of land, Part IIA of the Environment Protection Act 1990 provides the regulatory regime. The presence of hazardous ground gases could provide the "source" in a "pollutant linkage" which could lead the regulator to determine that considerable harm or there is a significant possibility of such harm being caused. Under such circumstances, the regulator would determine the land to be "contaminated land" under the provisions of the Act, setting out the process of remediation as described in the DETR Circular 02/2000 *Statutory guidance on contaminated land.*

Generation Potential of Sources
BS 8576:2013 Figure 6 provides a basis for assessing the generation potential from sources identified as part of the Phase I Assessment. These are summarised below:

Generation Potential	Typical Sources
Very Low	• Natural carbonate soil and strata, e.g. chalk and limestone. • Natural soil strata with a low degradable organic content, e.g. alluvium, peat. • In-filled pond less than 15 m diameter, in-filled before 1930s to 1940s. • Made ground with low degradable organic content (e.g. up to 5% organic material such as pieces of wood, pieces of paper, rags, etc. with a high proportion of ash and no food or other easily degradable waste). • Mine workings shallow or shaft (where there is clear evidence that they are flooded). • Inert landfill sites.
Low	• Natural soil strata with a high degradable organic content (DOC). • Made ground with total organic carbon (TOC) up to 6% (e.g. dock silt, no food or other easily degradable waste). • Foundry sand (includes phenolic binders, rags and wood that decay, albeit at low rates). • Landfill 1945 to mid 1960s (see also Moderate below).
Moderate	• Sewage sludge. • Mine workings – unflooded, more than 50 years since last worked (gas is liberated from coal when mine workings are excavated; this continues for up to about 50 years). • Landfill 1945 to mid 1960s (this could also be "low" or, if disturbed, "high").

Generation Potential	Typical Sources
High	• Landfill mid 1960s to early 1990s. • Mine workings – unflooded – less than 50 years since last worked.
Very High	• Municipal landfill sites. • Landfill early 1990s onward.

Frequency and Duration of Monitoring

The monitoring period for a specific site covers the "worst case" scenario. A "worst case" scenario will typically occur during falling atmospheric pressure and, in particular, weather conditions such as rainfall, frost and dry weather.

The benefits of the additional information and whether it is likely to change the scope of gas protection should be considered, as are the consequences of failing to characterise adequately pollutant linkages. Investigations concerned with soil gas are required to provide monitoring data sufficient to allow prediction of worst case conditions enabling the confident assessment of risk and subsequent design of appropriate gas protection schemes. Monitoring programmes should not be an academic exercise in data collection. CL:AIRE publication TB17 "Ground Gas Monitoring and 'Worst-Case' Conditions" provides further guidance.

Below are matrices that will aid in determining an appropriate number of gas monitoring visits and the length of monitoring period.

Typical/idealised periods of monitoring

		Generation of Potential Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of Development	Low (Commercial)	1 month	2 months	3 months	6 months	12 months
	Moderate (Apartments)	2 months	3 months	6 months	12 months	24 months
	High (Low rise Residential)	3 months	6 months	6 months	12 months	24 months

Typical/idealised frequency of monitoring/Number of Visits Required

		Gas Generation of Potential Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of Development	Low (Commercial)	4	6	6	12	12
	Moderate (Apartments)	6	6	9	12	24
	High (Low rise Residential)	6	9	12	24	24

Note

1 NHBC guidance also recommends this period of monitoring (Boyle and Witherington, 2007).
2 Generation potential of sources based on descriptions within BS 8576:2013.
3 At least two sets of readings should be at low and falling atmospheric pressure (but not restricted to periods below <1000 mb) known as worst case conditions. Historical data can be used as part of the data set (Table 5.5b).

It is recommended that newly installed monitoring wells are left for 24 hours to allow the soil gas to reach equilibrium. It should be recognised, however, that some soil gas regimes could take considerably longer (up to seven days). Interpretation of any initial readings should take this equilibrium process into account.

RB17 Approach

CL:AIRE RB17 (Card et al 2012) is a pragmatic approach to ground gas risk assessment and was developed because gas concentration, pressure and flow rate measured in a well headspace may not be representative of the conditions in the surrounding formation.

In these low-risk situations, the approach is to use the conceptual site model and the estimation of the likely gas generation from a source to identify where or if gas monitoring is required to better define the risks.

Under this approach, for sites with natural soils only with no credible methane source, then no action is required (no monitoring or gas protection measures) as this represents Characteristic Situation 1 (CS1).

Unexploded Ordnance (UXO) Guidance

Clients have a legal duty under the CDM 2015 Regulations to provide designers and contractors with project-specific health and safety information needed to identify hazards and risks. This includes the possibility of unexploded ordnance (UXO) being encountered on the site. Further details are given in CIRIA report C681.

BSL carry out non-specialist UXO screening exercises by considering any evidence of UK defence activities on or near the site evident from gathered desk study information and the unexploded aerial delivered bomb (UXB) online risk maps produced by Zetica. Other data sources are available, but as a first stage screening exercise the freely available online Zetica maps have been used. The level of risk stated is that determined by Zetica, a company experienced and considered competent in the assessment of UXO.

APPENDIX B
Historical Maps

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Site Details:

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: 1056 Scale Town Plan

Map date: **1873**

Scale: 1:1,056

Printed at: 1:1,056

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Production date: 13 February 2023

Map legend available at:
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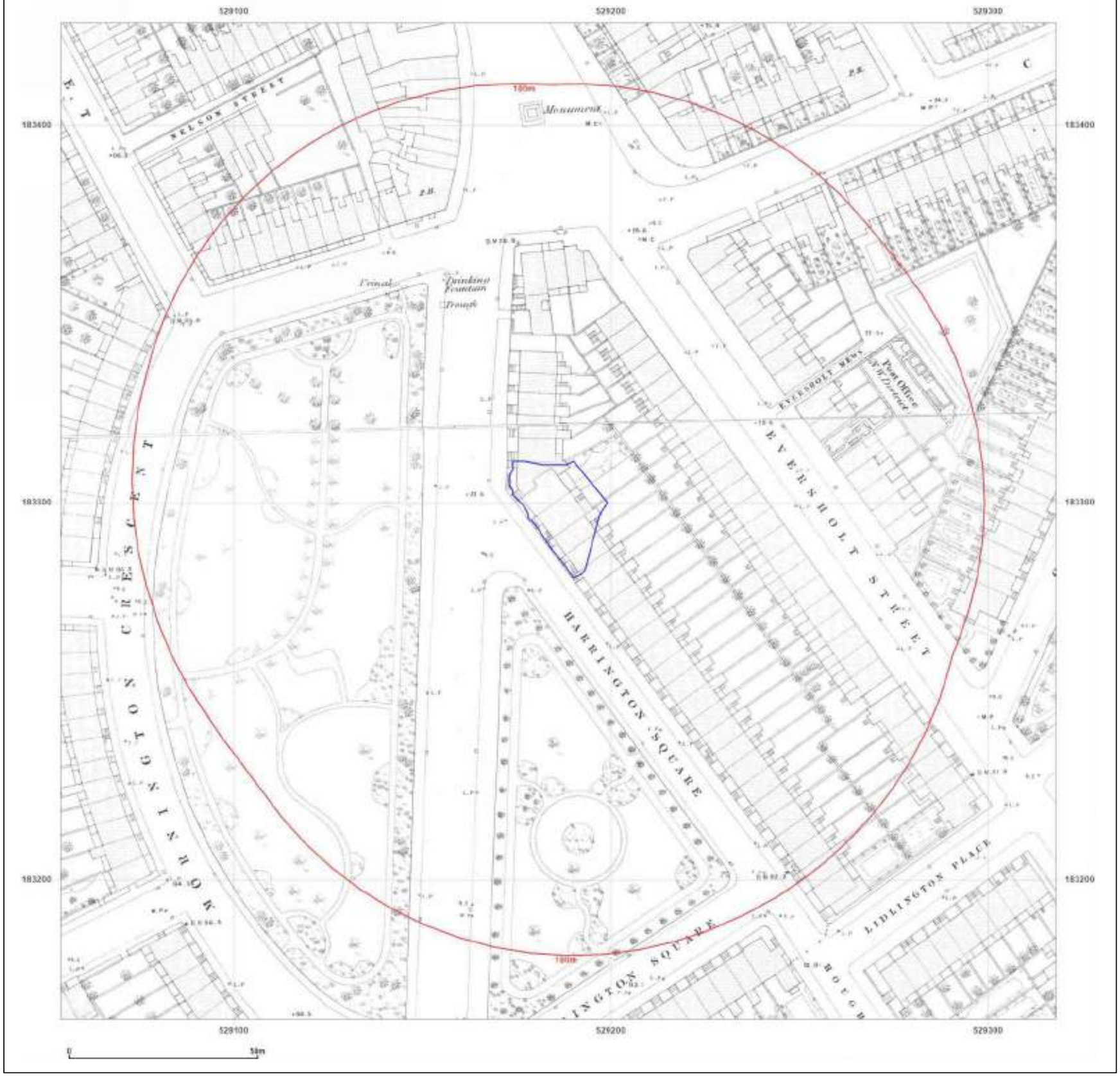

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Site Details:

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: 1056 Scale Town Plan

Map date: **1870-1873**

Scale: 1:1,056

Printed at: 1:1,056

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Surveyed 1870
Revised N/A
Edition 1873
Copyright N/A
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1876**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1870
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Edition 1876
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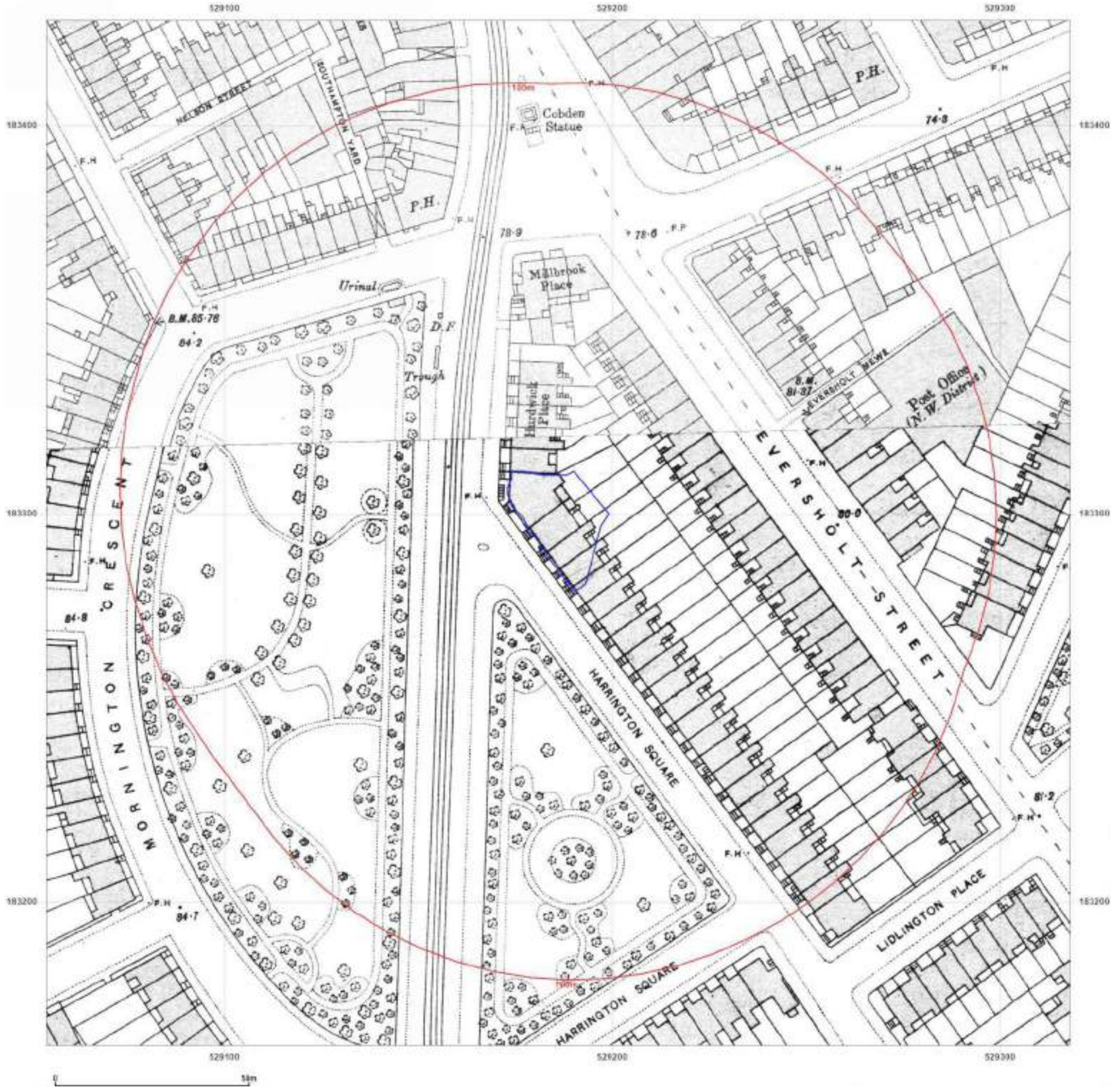

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Site Details:

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: 1056 Scale Town Plan

Map date: **1896**

Scale: 1:1,056

Printed at: 1:1,056

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1896**

Scale: 1:2,500

Printed at: 1:2,500

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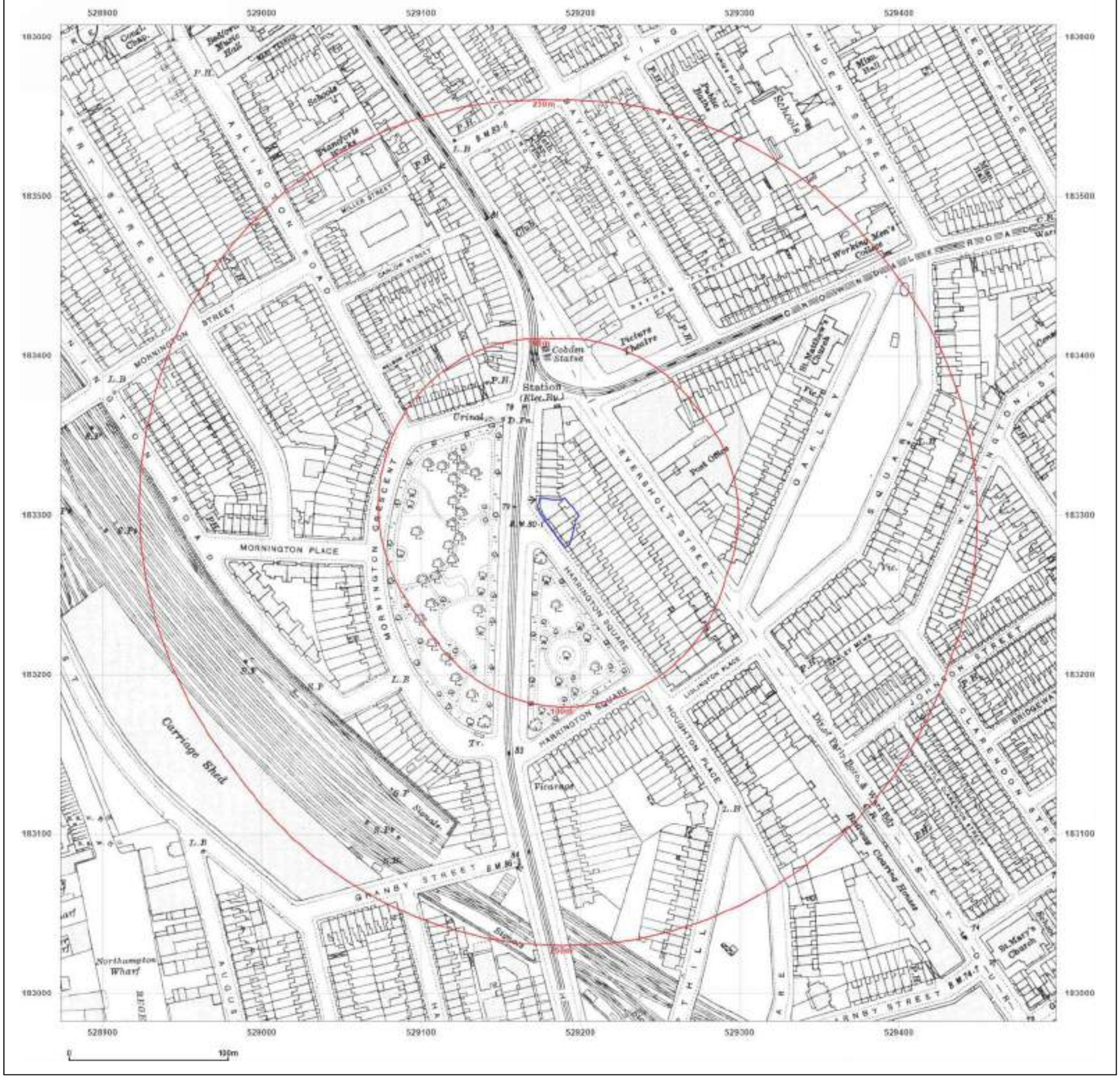

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1916**

Scale: 1:2,500

Printed at: 1:2,500

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Edition N/A
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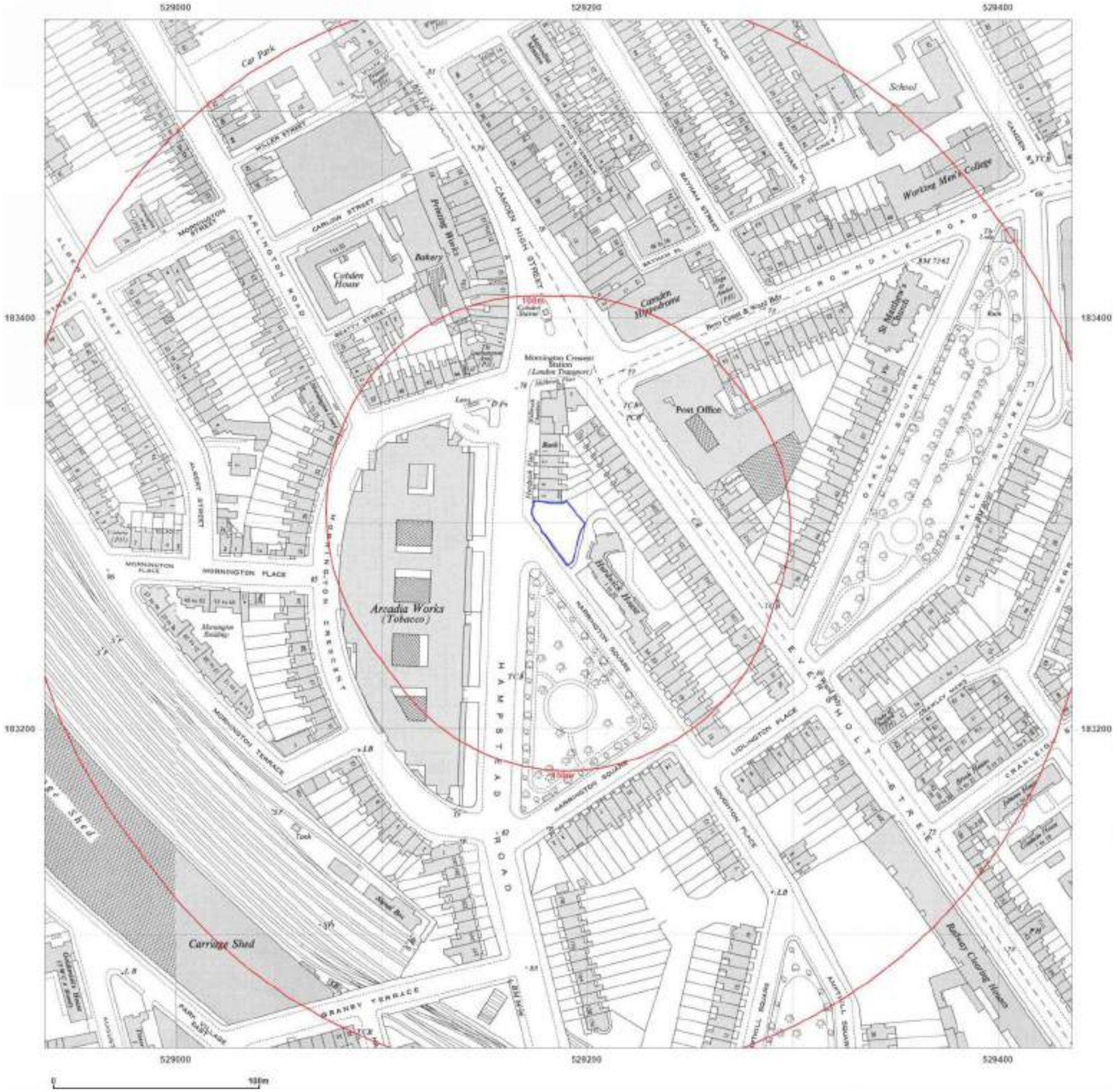

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1951-1952**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1952
Revised 1952
Edition N/A
Copyright N/A
Levelled 1934

Surveyed 1951
Revised 1951
Edition N/A
Copyright N/A
Levelled 1934

Surveyed 1952
Revised 1952
Edition N/A
Copyright N/A
Levelled 1934

Surveyed 1952
Revised 1952
Edition N/A
Copyright N/A
Levelled 1932

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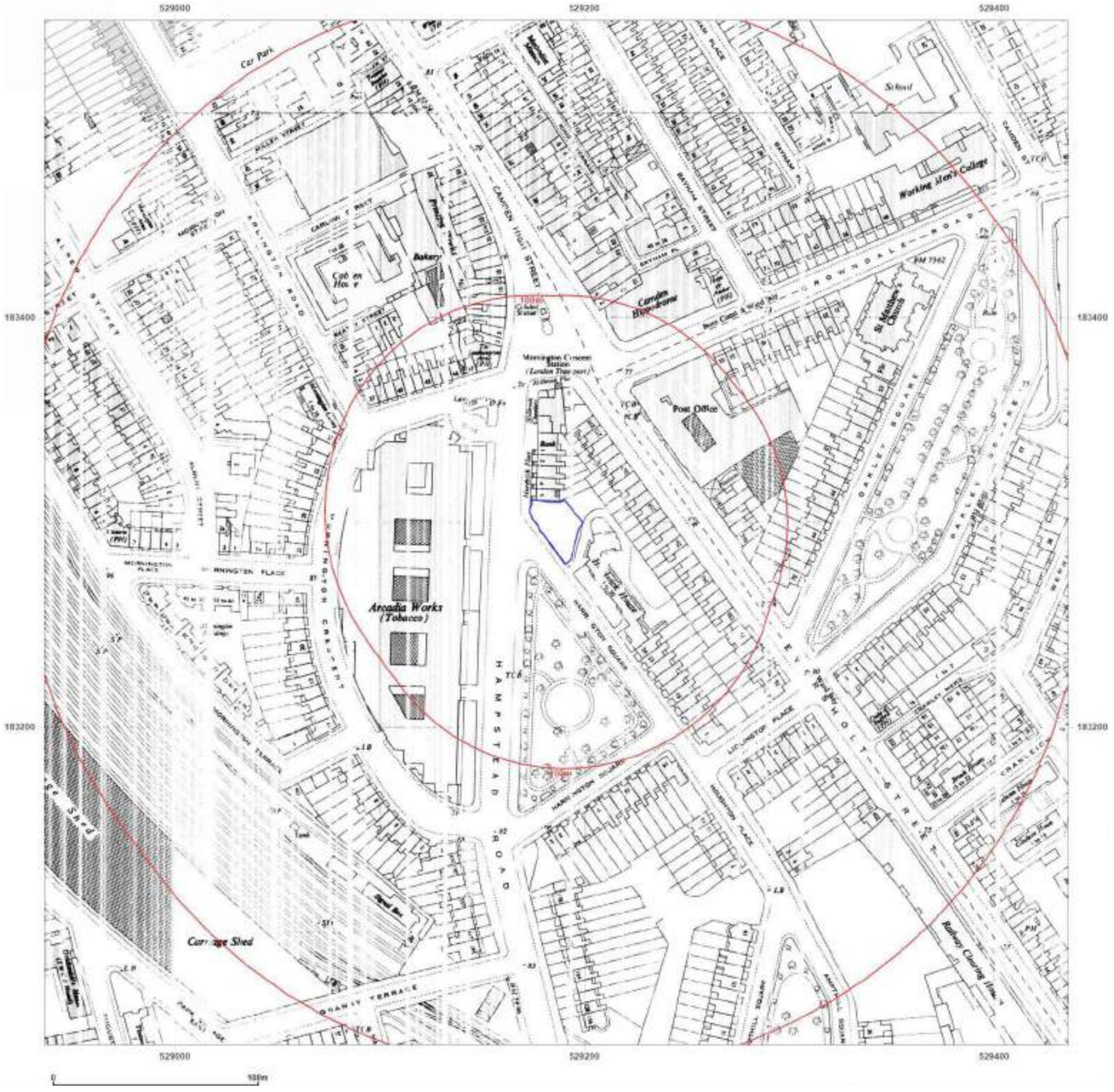

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Site Details:

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1952-1953**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1952
Revised 1952
Edition N/A
Copyright N/A
Levelled 1934

Surveyed N/A
Revised N/A
Edition N/A
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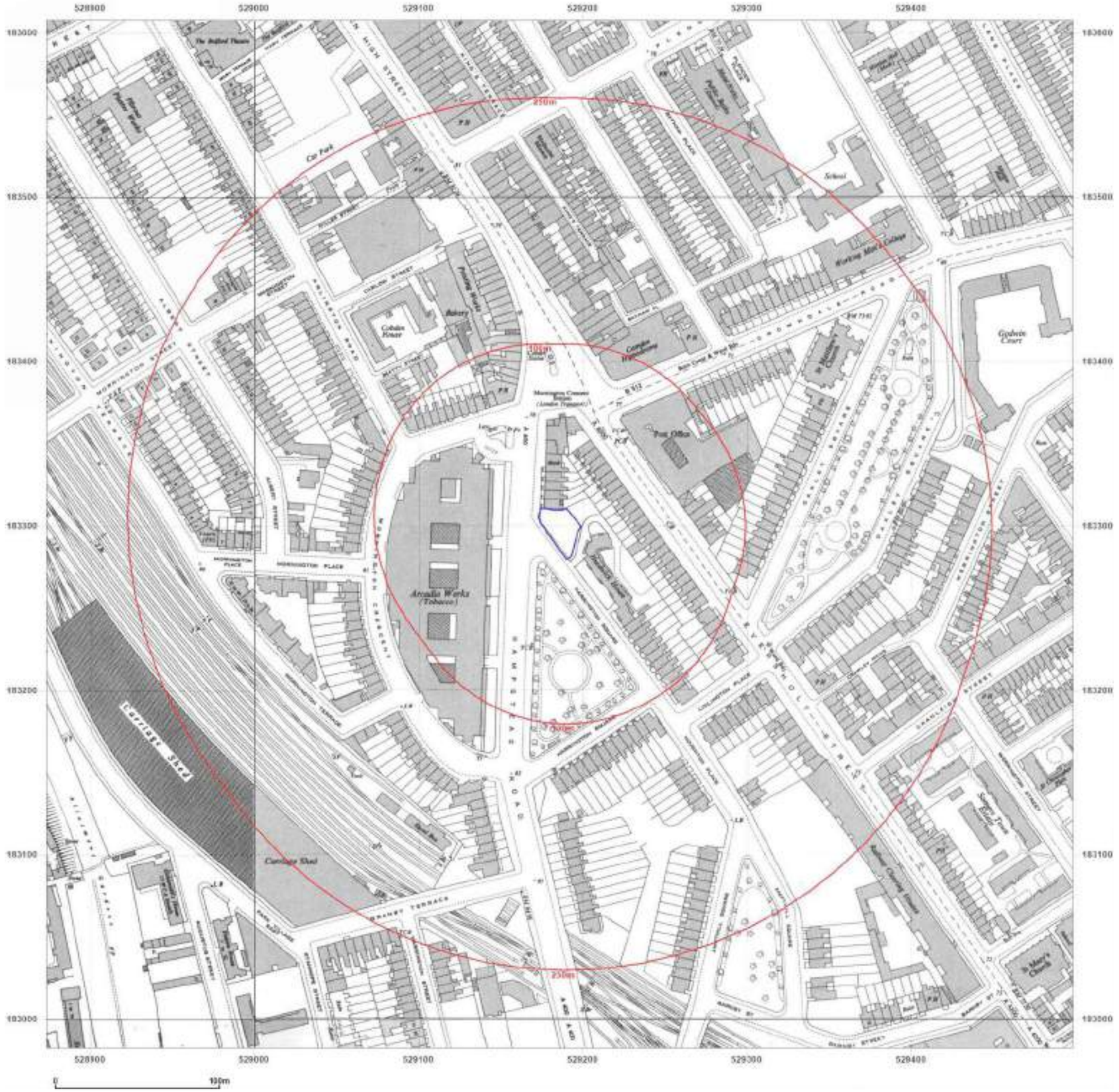

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1952-1954**

Scale: 1:2,500

Printed at: 1:2,500

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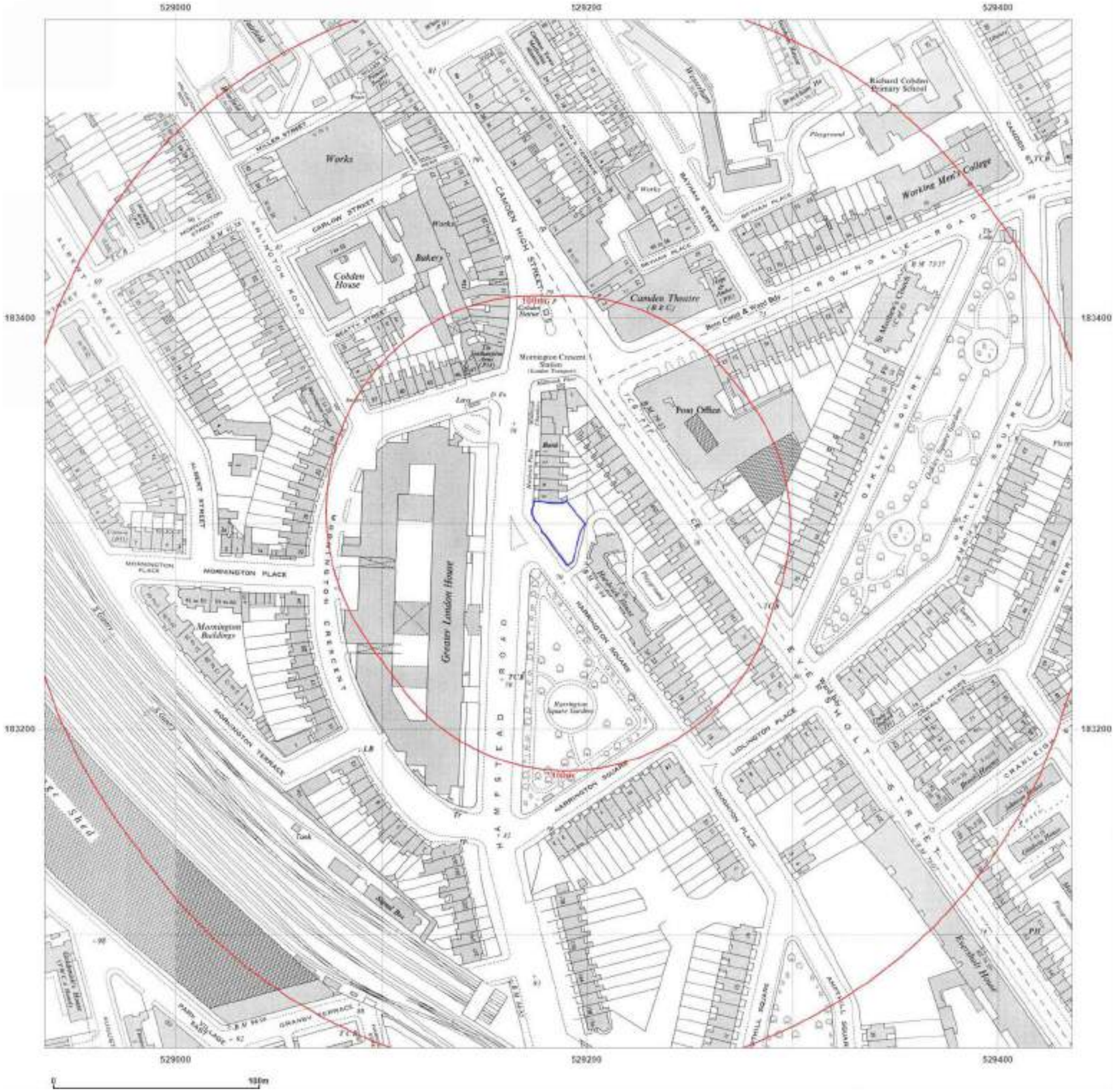

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1961-1964**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1961
Revised 1961
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1952
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Edition N/A
Copyright 1962
Levelled 1953

Surveyed 1952
Revised 1963
Edition N/A
Copyright 1964
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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1968-1971**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed N/A
Revised N/A
Edition N/A
Copyright 1971
Levelled 1954

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
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Surveyed N/A
Revised 1968
Edition N/A
Copyright N/A
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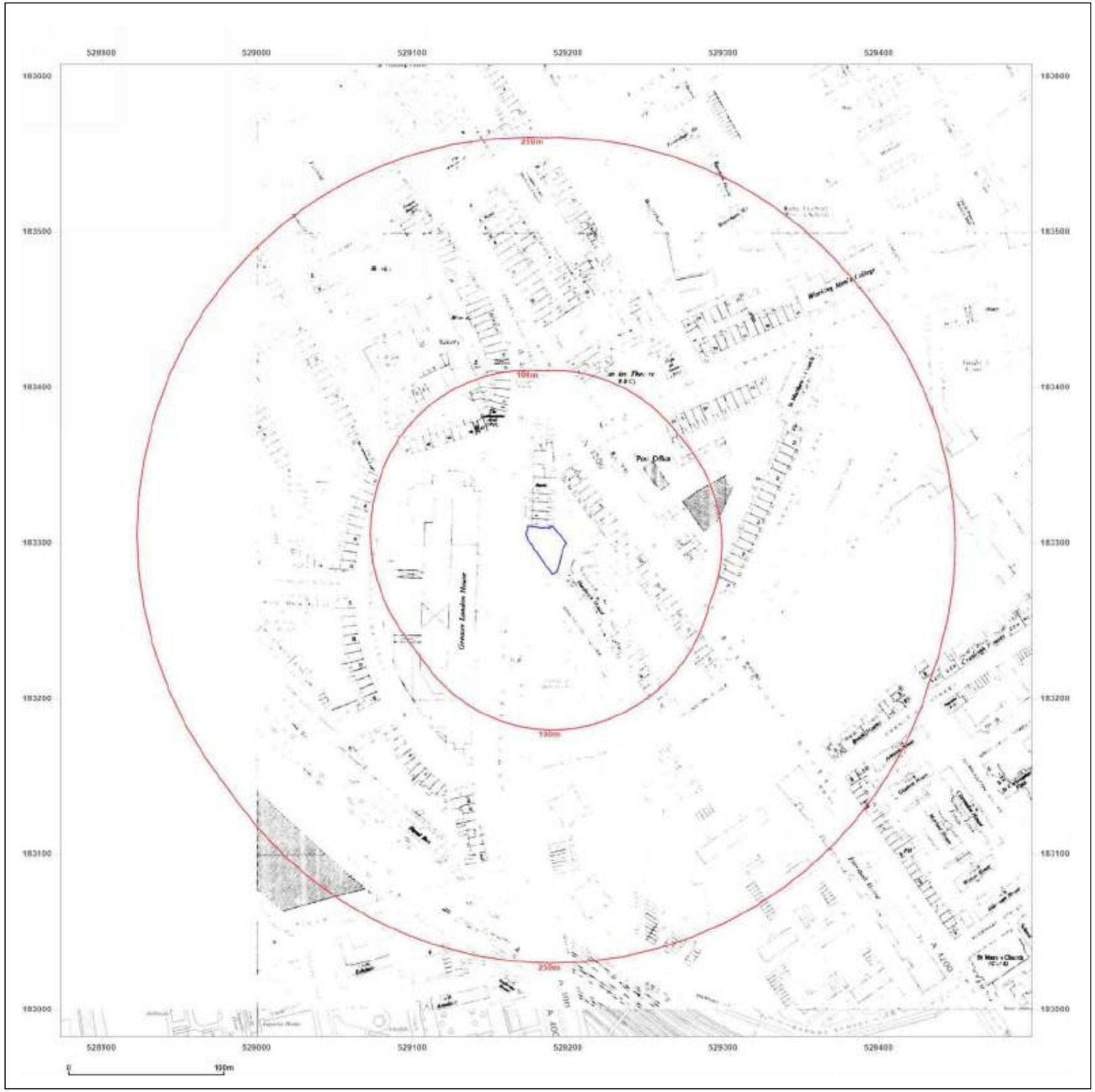

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1970-1971**

Scale: 1:2,500

Printed at: 1:2,500

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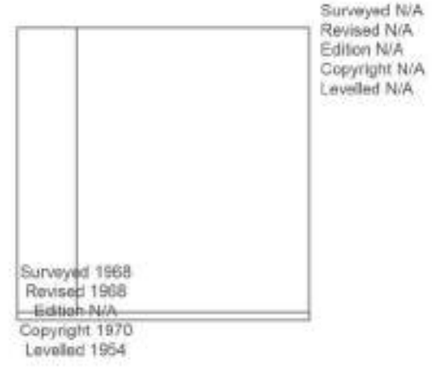

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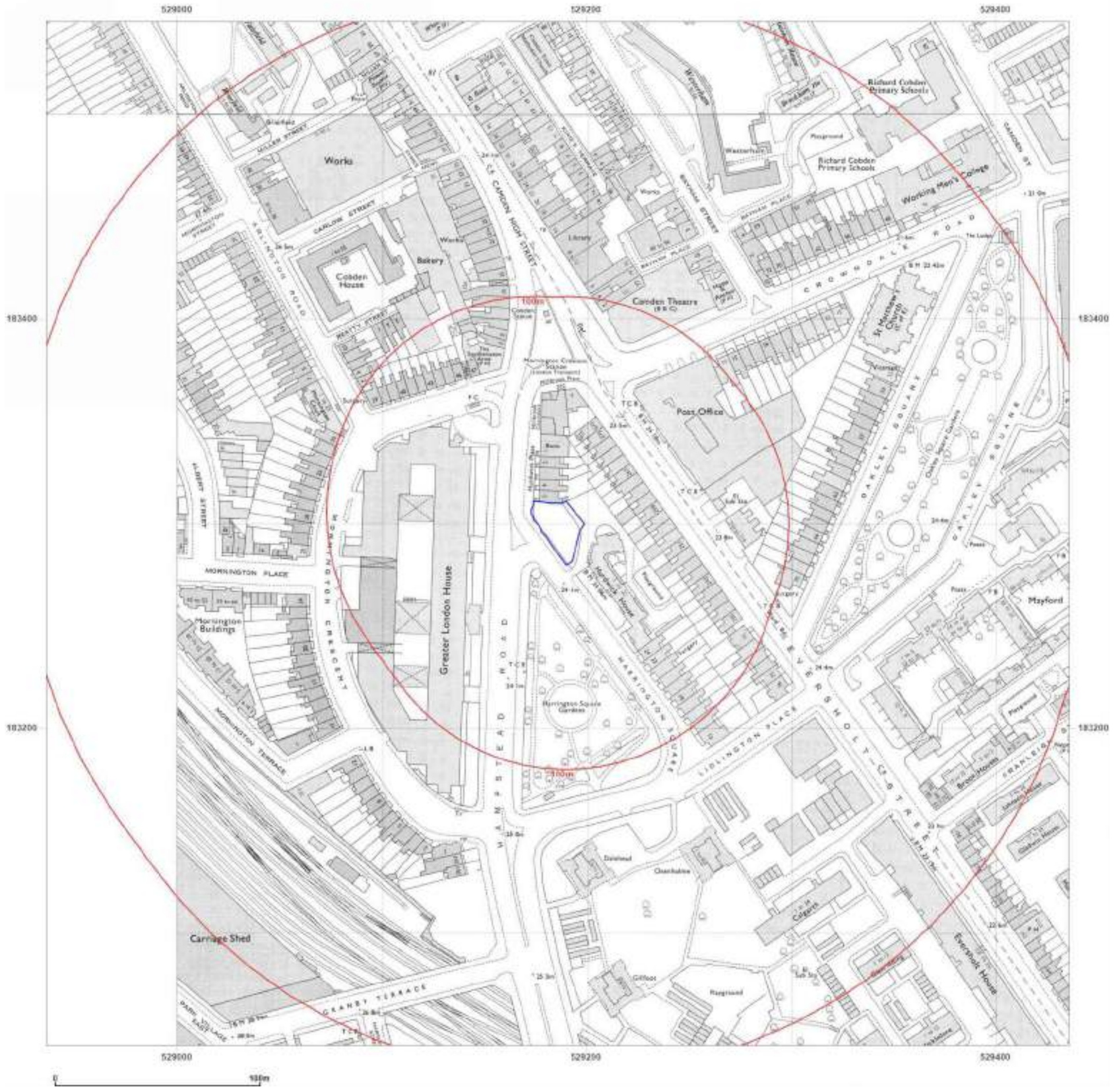

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Site Details:

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1968-1972**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1952
Revised 1968
Edition N/A
Copyright 1969
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Surveyed 1951
Revised 1968
Edition N/A
Copyright 1968
Levelled 1954

Surveyed 1952
Revised 1972
Edition N/A
Copyright 1972
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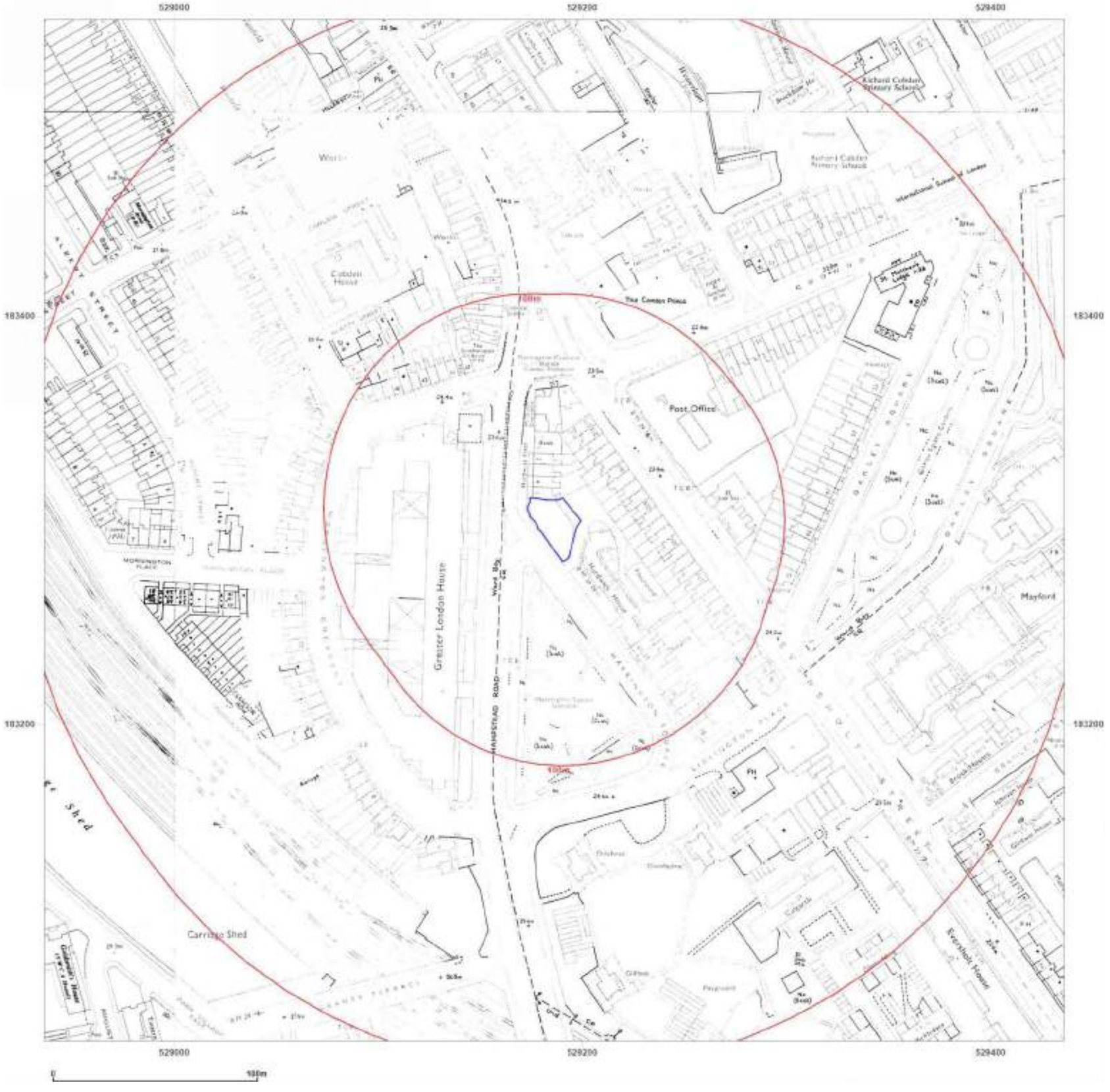

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1986-1991**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1975 Revised 1990 Edition N/A Copyright 1990 Levelled 1975	Surveyed N/A Revised N/A Edition N/A Copyright 1986 Levelled 1975

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1992-1994**

Scale: 1:1,250

Printed at: 1:2,000

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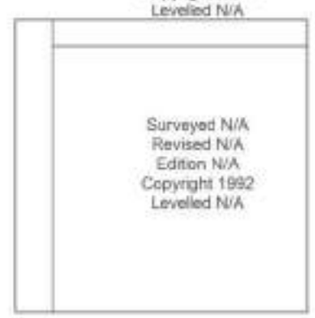
Surveyed N/A
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A



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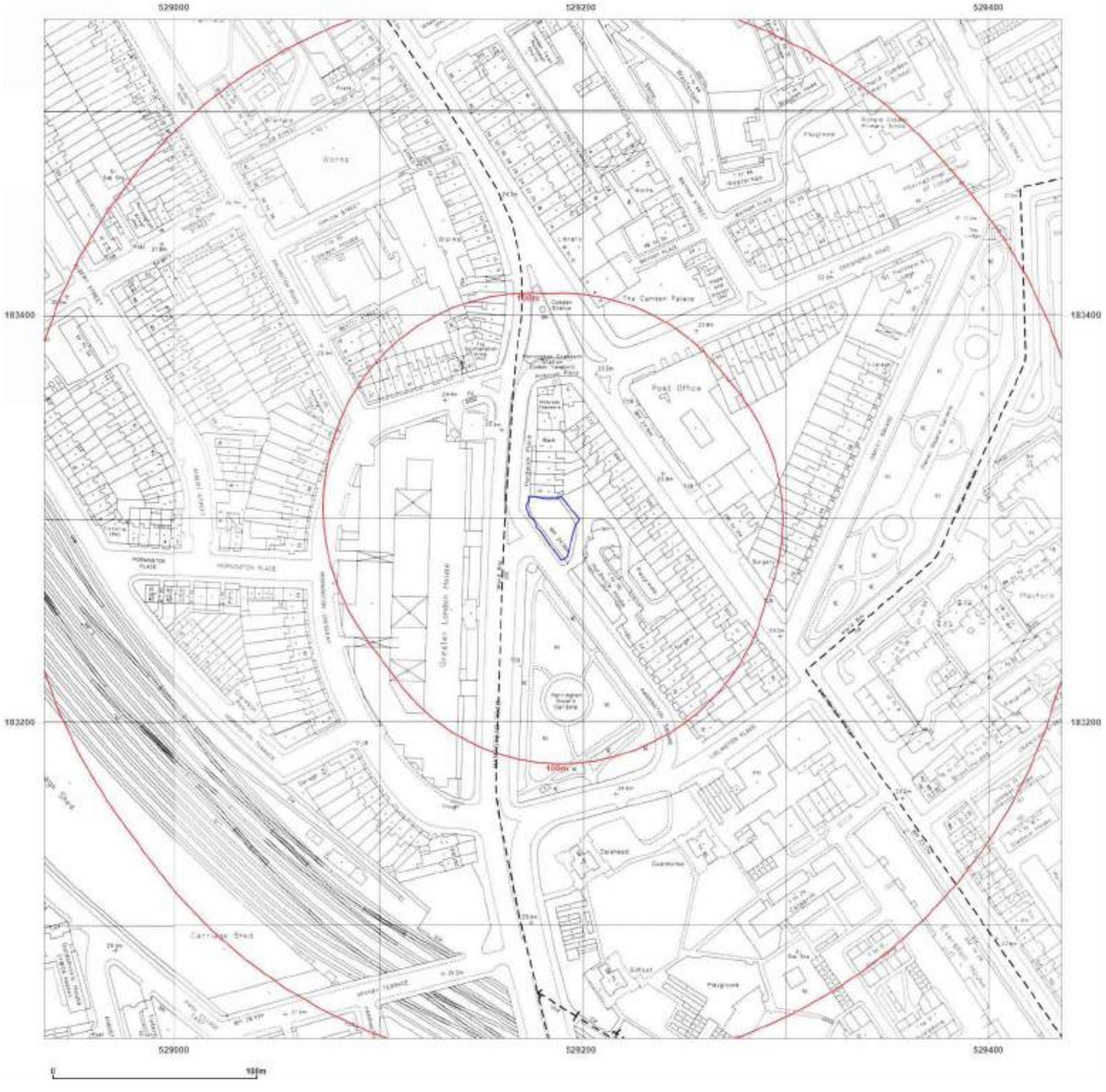

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Site Details:

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1991-1995**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1991 Revised 1991 Edition N/A Copyright 1991 Levelled N/A	Surveyed 1991 Revised 1991 Edition N/A Copyright 1991 Levelled N/A

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

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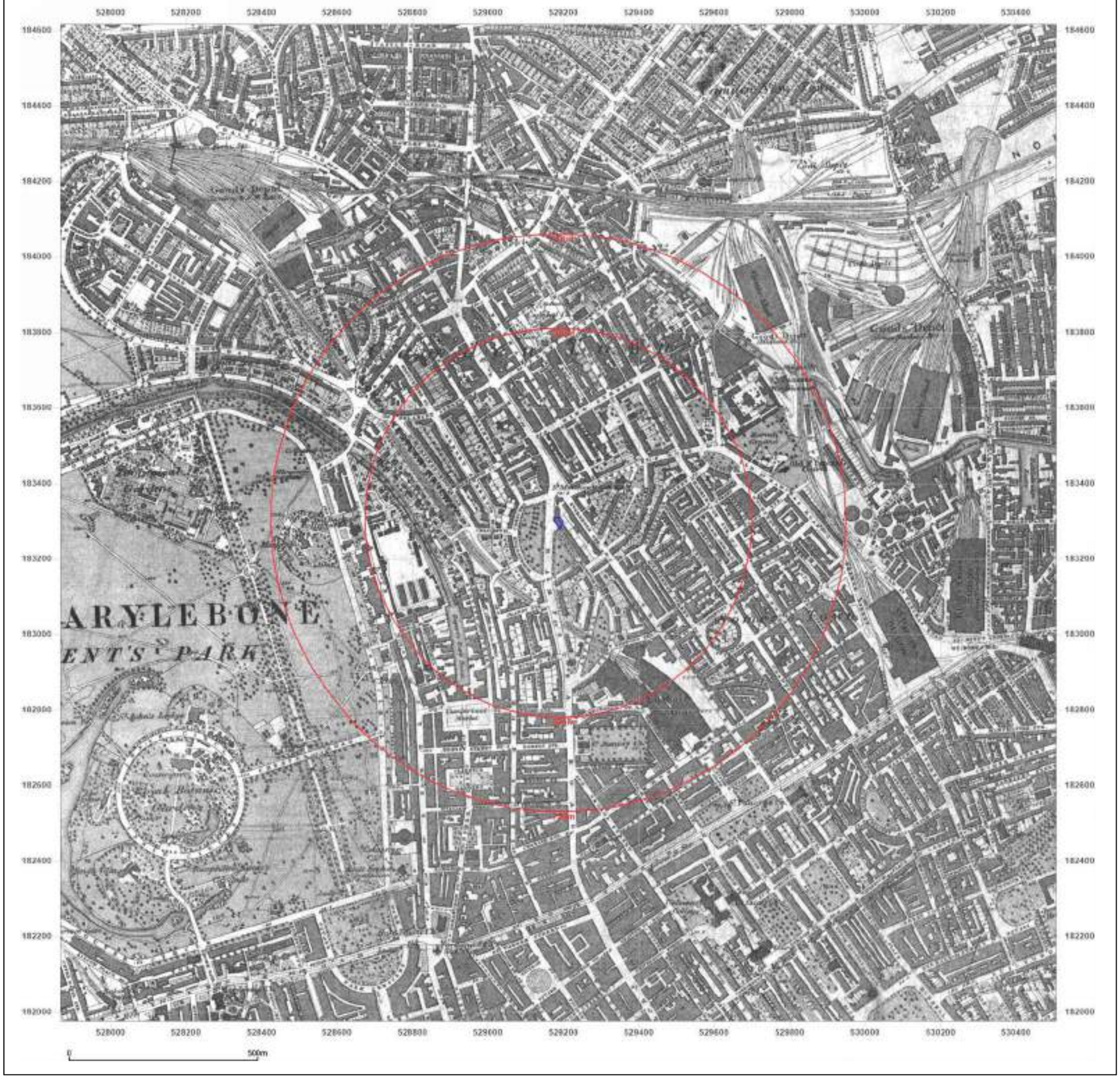

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1882**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1873
Revised 1873
Edition 1882
Copyright N/A
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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1894-1895**

Scale: 1:10,560

Printed at: 1:10,560

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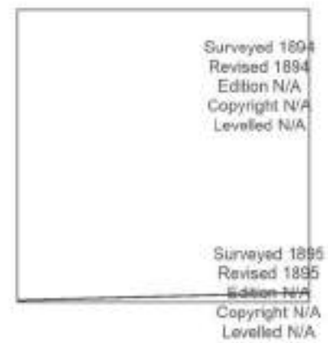

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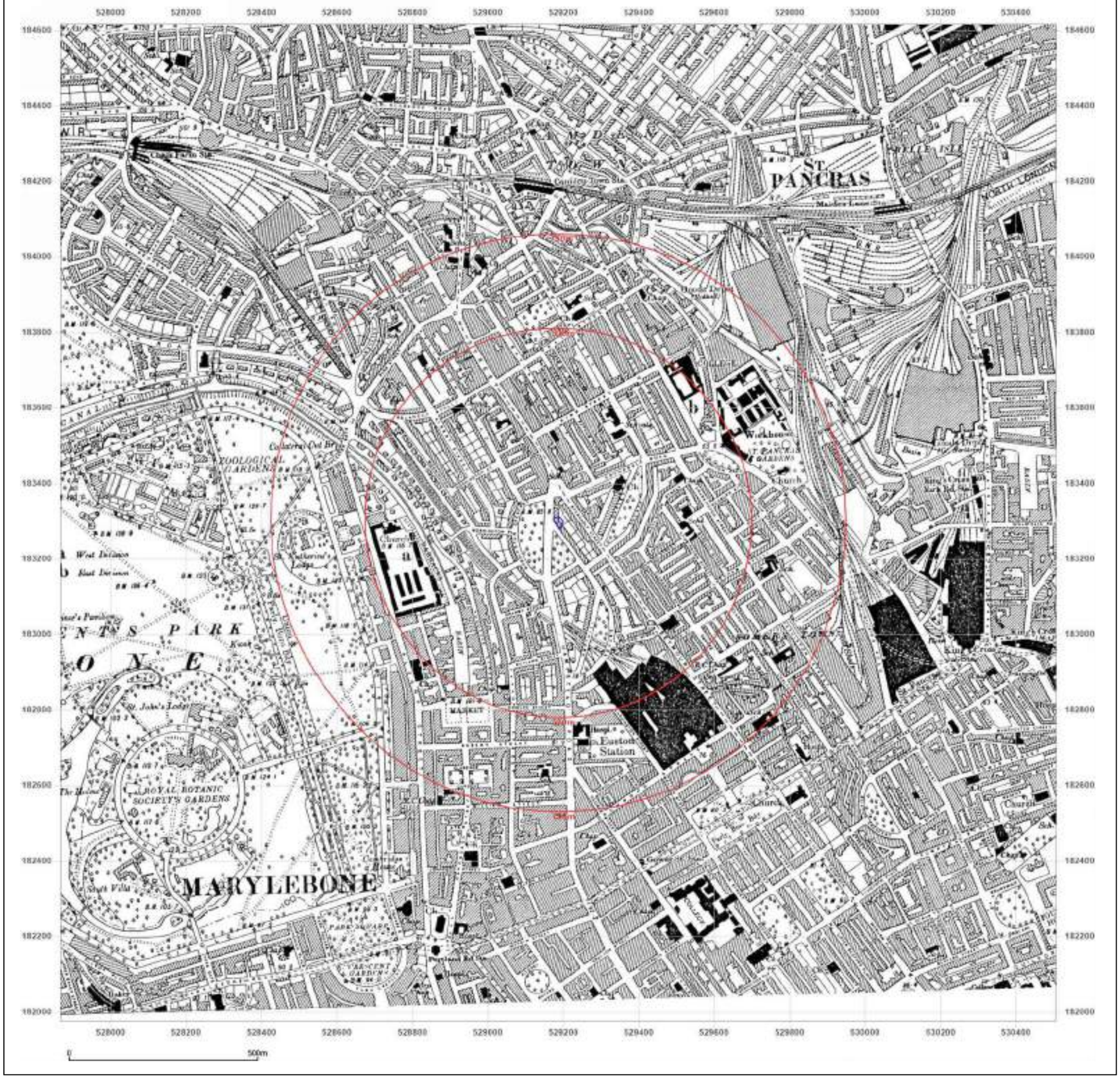

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1896**

Scale: 1:10,560

Printed at: 1:10,560

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Revised 1894
Edition 1896
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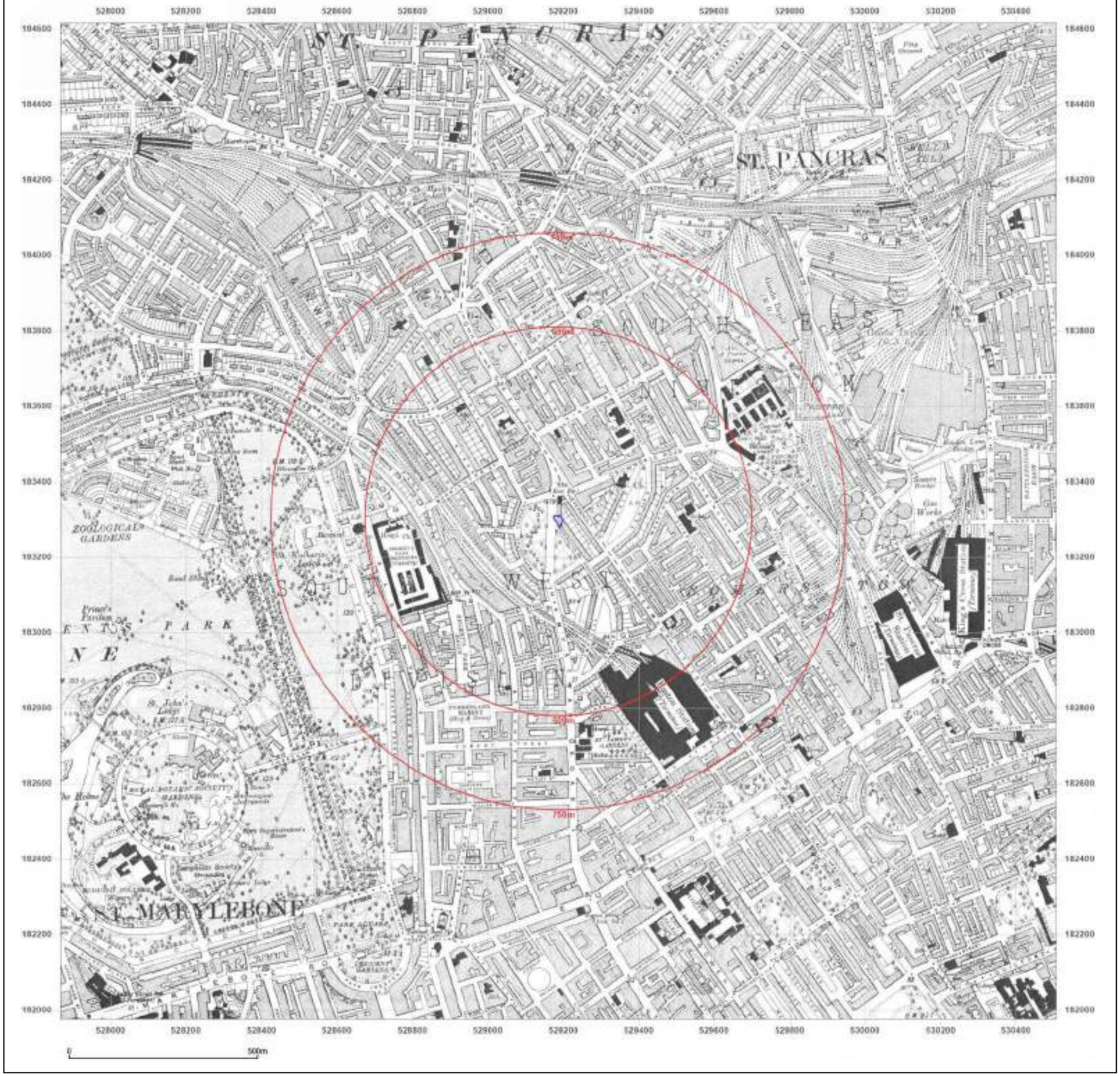

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1920**

Scale: 1:10,560

Printed at: 1:10,560

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Revised 1919
Edition 1920
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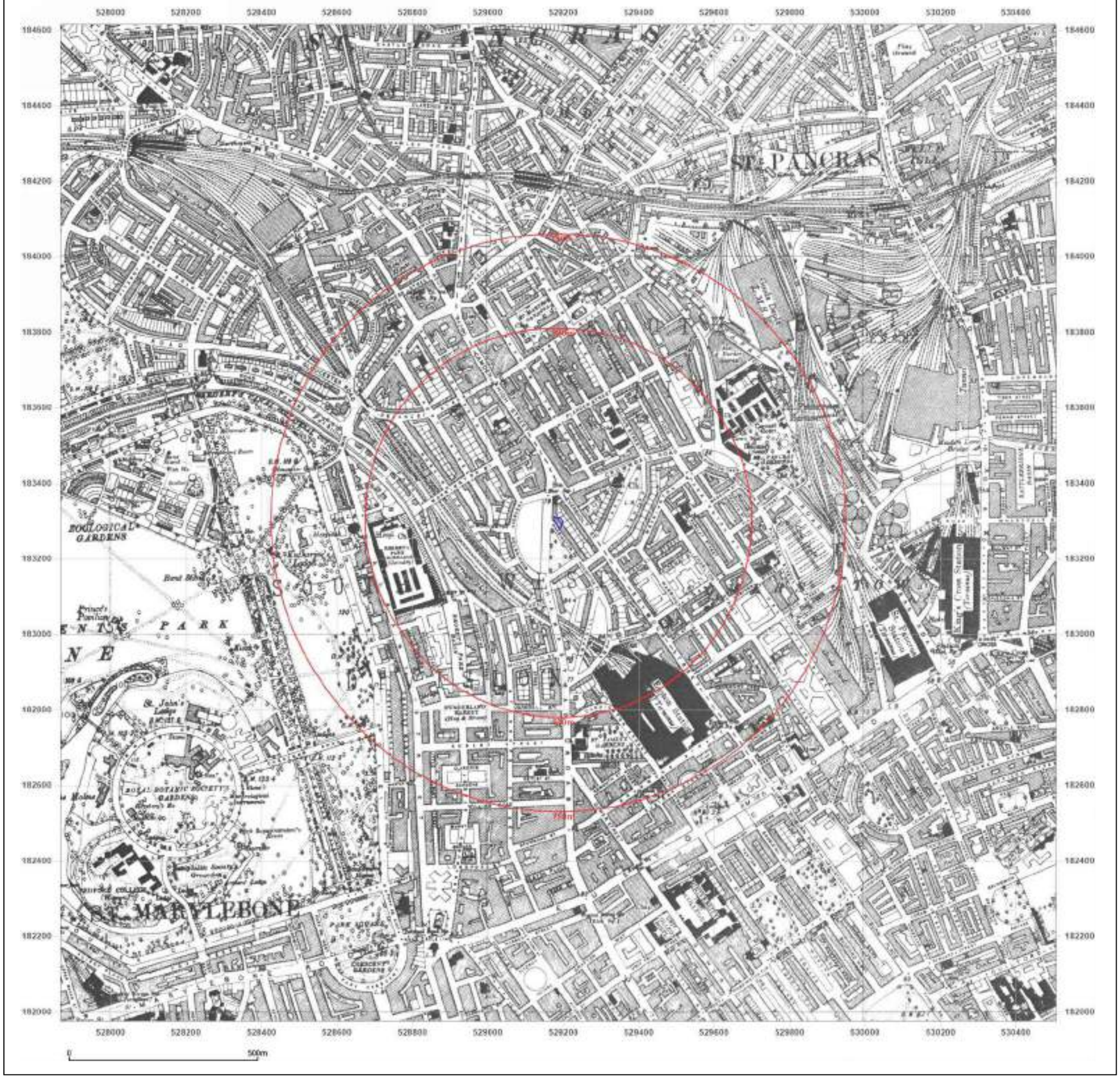

Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1872
Revised 1938
Edition N/A
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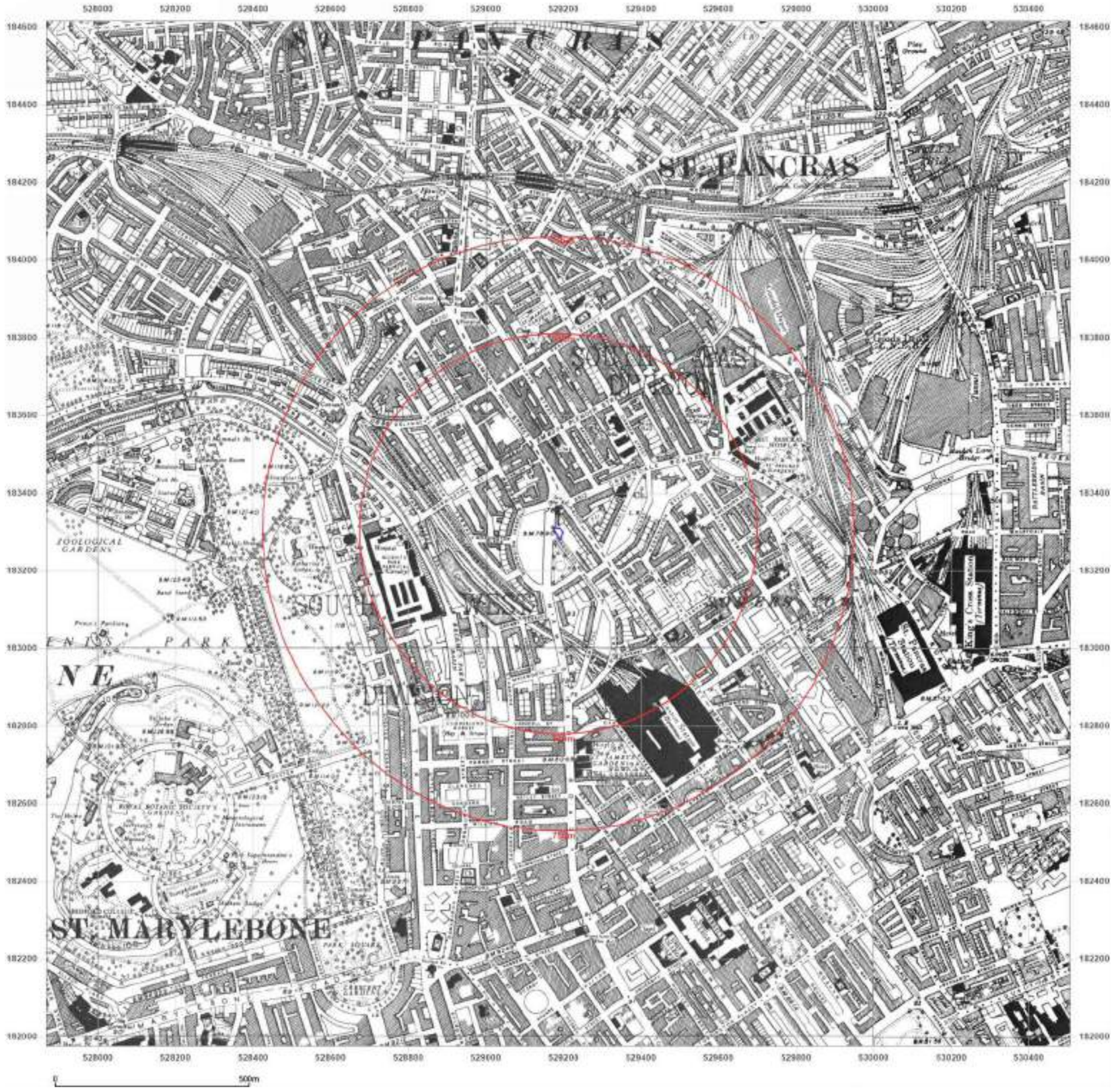

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: Provisional

Map date: **1948-1951**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed N/A
Revised 1949
Edition N/A
Copyright 1951
Levelled N/A

Surveyed N/A
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

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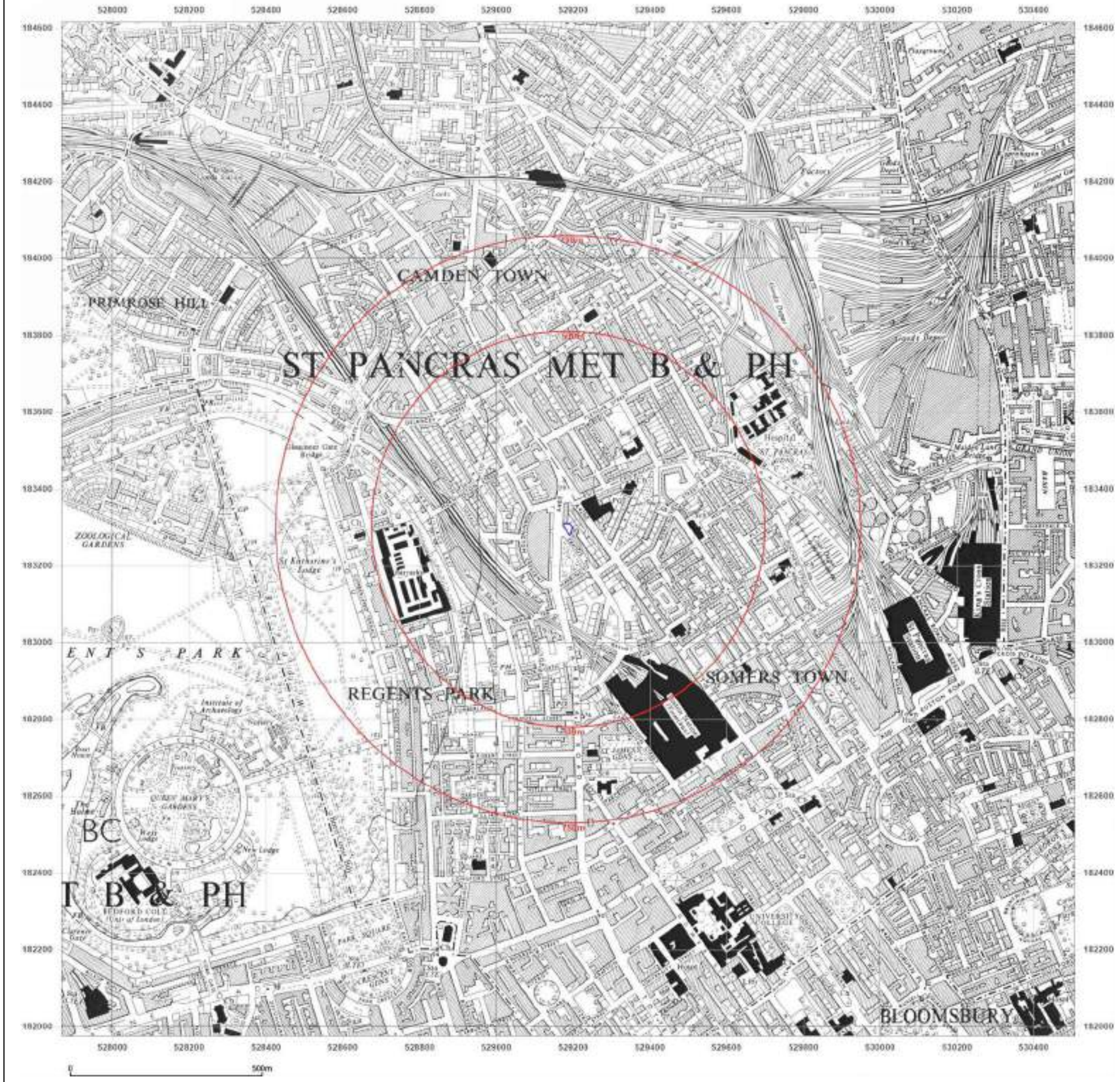

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Site Details:

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: Provisional

Map date: **1957**

Scale: 1:10,560

Printed at: 1:10,560

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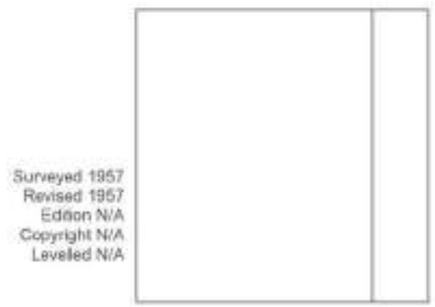

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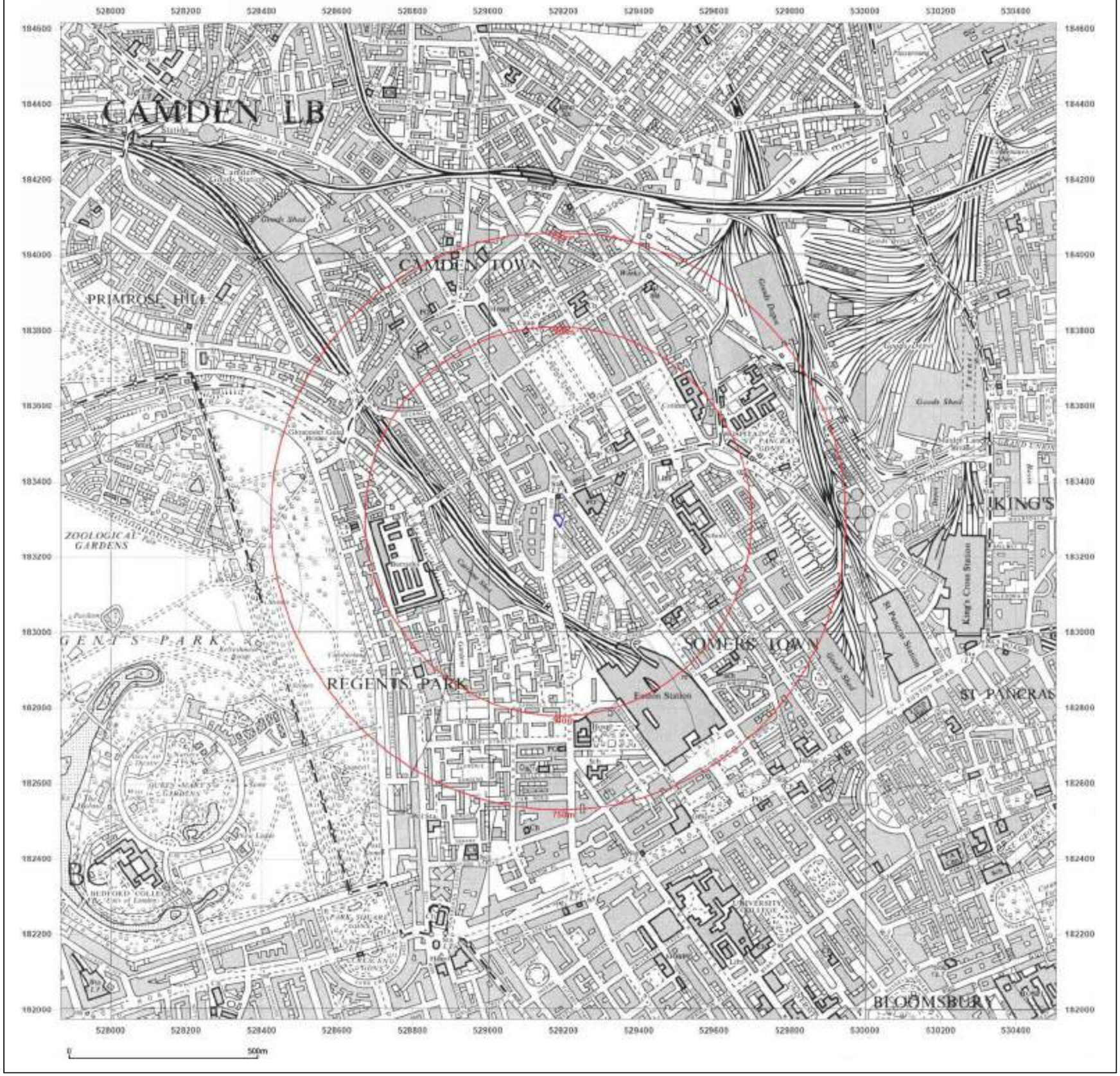

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: Provisional

Map date: **1966-1968**

Scale: 1:10,560

Printed at: 1:10,560

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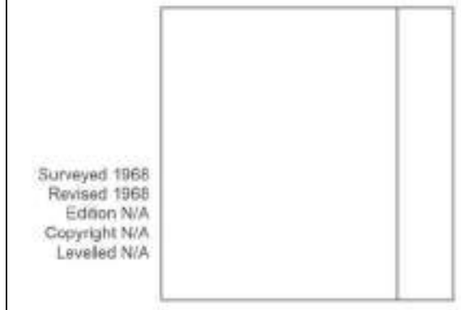

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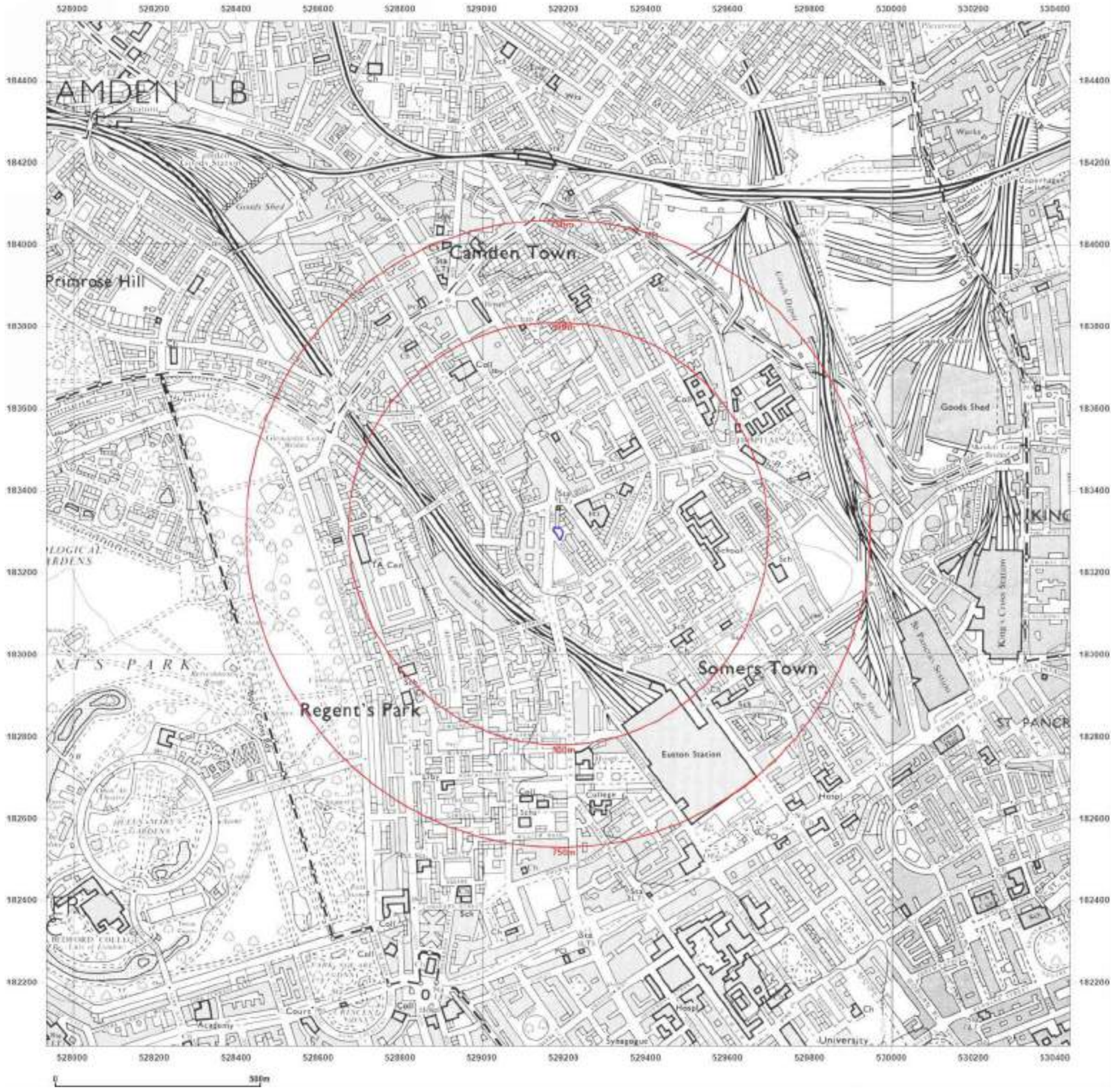

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1971-1973**

Scale: 1:10,000

Printed at: 1:10,000

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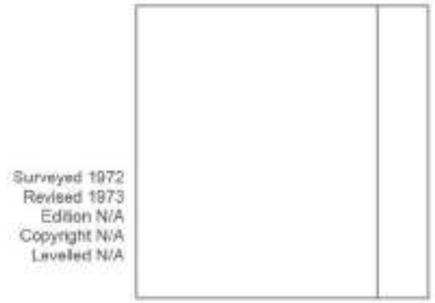

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **1989-1994**

Scale: 1:10,000

Printed at: 1:10,000

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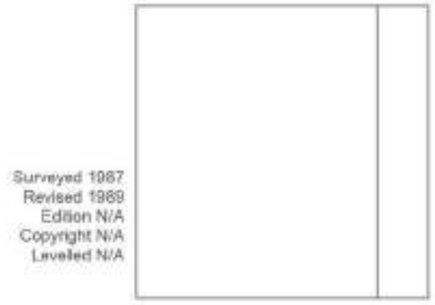

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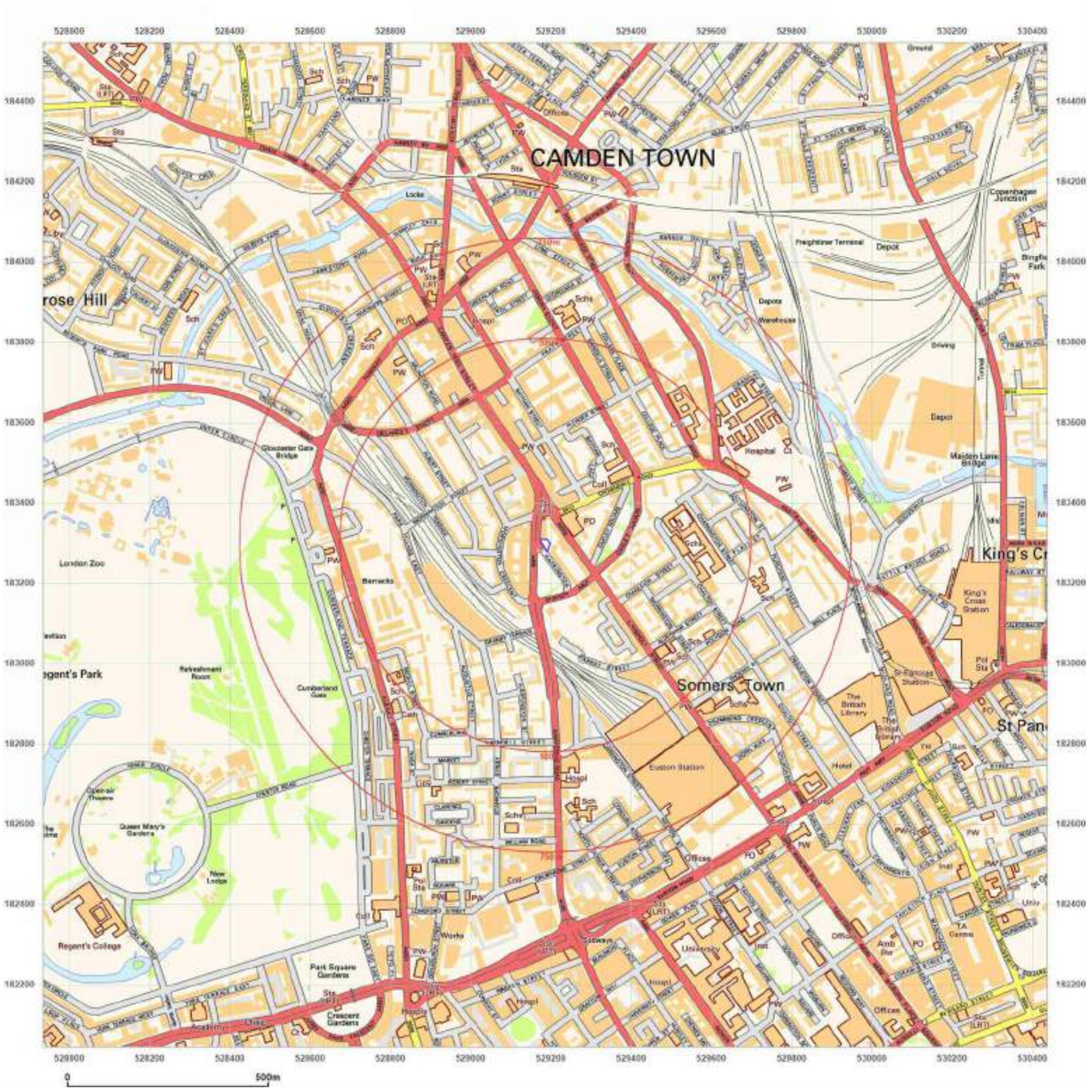

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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2001

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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2010

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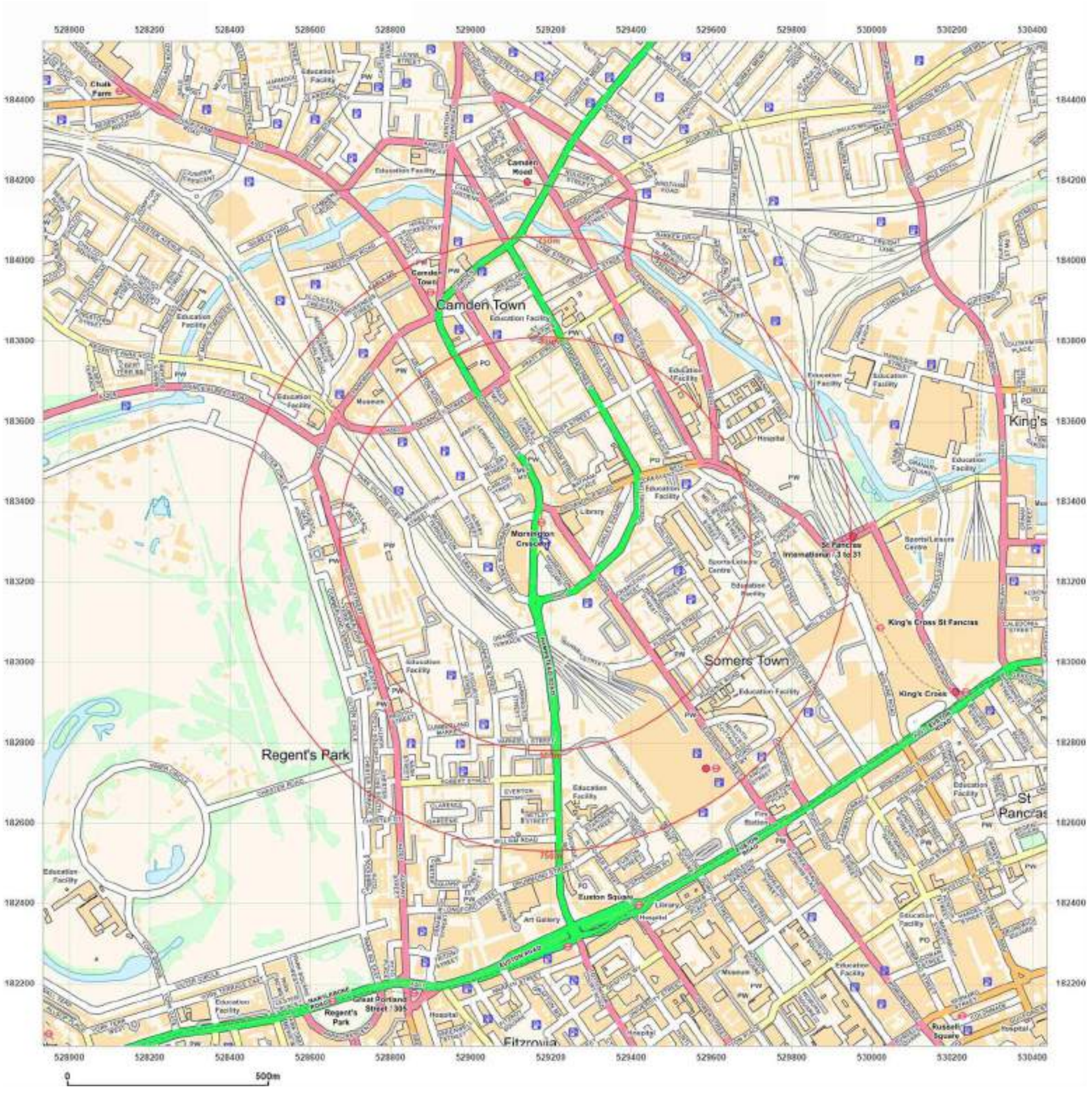

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Site Details:

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Client Ref: C5331-3944-SD
Report Ref: BRO-9352312
Grid Ref: 529186, 183295

Map Name: National Grid

Map date: **2023**

Scale: 1:10,000

Printed at: 1:10,000

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APPENDIX C
Geo-Environmental Data Report

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

CAR PARK, HURDWICK HOUSE, HARRINGTON SQUARE, LONDON, NW1 2JE

Order Details

Date: 13/02/2023

Your ref: C5331-3944-SD

Our Ref: BRO-9352313

Site Details

Location: 529189 183300

Area: 0.04 ha

Authority: London Borough of Camden

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

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	1	2	12	40	-
17	1.2	Historical tanks	0	0	2	17	-
18	1.3	Historical energy features	0	0	3	17	-
19	1.4	Historical petrol stations	0	0	0	0	-
19	1.5	Historical garages	0	0	6	15	-
20	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
21	2.1	Historical industrial land uses	1	5	21	53	-
24	2.2	Historical tanks	0	0	5	29	-
26	2.3	Historical energy features	0	0	8	48	-
28	2.4	Historical petrol stations	0	0	0	0	-
28	2.5	Historical garages	0	0	17	24	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
31	3.1	Active or recent landfill	0	0	0	0	-
31	3.2	Historical landfill (BGS records)	0	0	0	0	-
32	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
32	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
32	3.5	Historical waste sites	0	0	0	3	-
33	3.6	Licensed waste sites	0	0	0	1	-
33	3.7	Waste exemptions	0	1	3	48	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
38	4.1	Recent industrial land uses	0	1	16	-	-
40	4.2	Current or recent petrol stations	0	0	1	1	-
40	4.3	Electricity cables	0	0	0	0	-
40	4.4	Gas pipelines	0	0	0	0	-
40	4.5	Sites determined as Contaminated Land	0	0	0	0	-

40	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
41	4.7	Regulated explosive sites	0	0	0	0	-
41	4.8	Hazardous substance storage/usage	0	0	0	0	-
41	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
41	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
41	**4.11**	**Licensed pollutant release (Part A(2)/B)**	0	0	2	4	-
42	**4.12**	**Radioactive Substance Authorisations**	0	0	0	16	-
44	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
45	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
45	4.15	Pollutant release to public sewer	0	0	0	0	-
45	4.16	List 1 Dangerous Substances	0	0	0	0	-
45	4.17	List 2 Dangerous Substances	0	0	0	0	-
45	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	0	1	-
46	4.19	Pollution inventory substances	0	0	0	0	-
46	4.20	Pollution inventory waste transfers	0	0	0	0	-
46	**4.21**	**Pollution inventory radioactive waste**	0	0	0	1	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
48	5.1	Superficial aquifer	None (within 500m)				
49	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
50	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
51	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
51	5.5	Groundwater vulnerability- local information	None (within 0m)				
52	**5.6**	**Groundwater abstractions**	0	0	0	0	53
65	**5.7**	**Surface water abstractions**	0	0	0	0	5
66	**5.8**	**Potable abstractions**	0	0	0	0	19
71	5.9	Source Protection Zones	0	0	0	0	-
71	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
72	6.1	Water Network (OS MasterMap)	0	0	0	-	-

72	6.2	Surface water features	0	0	0	-	-
73	**6.3**	**WFD Surface water body catchments**	1	-	-	-	-
73	6.4	WFD Surface water bodies	0	0	0	-	-
73	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
74	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
74	7.2	Historical Flood Events	0	0	0	-	-
74	7.3	Flood Defences	0	0	0	-	-
75	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
75	7.5	Flood Storage Areas	0	0	0	-	-
76	7.6	Flood Zone 2	None (within 50m)				
76	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
77	**8.1**	**Surface water flooding**	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
79	**9.1**	**Groundwater flooding**	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
80	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
81	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
81	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
81	10.4	Special Protection Areas (SPA)	0	0	0	0	0
81	10.5	National Nature Reserves (NNR)	0	0	0	0	0
82	**10.6**	**Local Nature Reserves (LNR)**	0	0	0	0	3
82	10.7	Designated Ancient Woodland	0	0	0	0	0
82	10.8	Biosphere Reserves	0	0	0	0	0
83	10.9	Forest Parks	0	0	0	0	0
83	10.10	Marine Conservation Zones	0	0	0	0	0
83	10.11	Green Belt	0	0	0	0	0
83	10.12	Proposed Ramsar sites	0	0	0	0	0

83	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
84	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
84	10.15	Nitrate Sensitive Areas	0	0	0	0	0
84	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
85	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
86	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
87	11.1	World Heritage Sites	0	0	0	-	-
88	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
88	11.3	National Parks	0	0	0	-	-
88	**11.4**	**Listed Buildings**	0	1	24	-	-
90	**11.5**	**Conservation Areas**	1	0	0	-	-
90	11.6	Scheduled Ancient Monuments	0	0	0	-	-
91	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
92	**12.1**	**Agricultural Land Classification**	Urban (within 250m)				
93	12.2	Open Access Land	0	0	0	-	-
93	12.3	Tree Felling Licences	0	0	0	-	-
93	12.4	Environmental Stewardship Schemes	0	0	0	-	-
93	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
94	**13.1**	**Priority Habitat Inventory**	0	0	15	-	-
95	13.2	Habitat Networks	0	0	0	-	-
95	13.3	Open Mosaic Habitat	0	0	0	-	-
96	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
97	**14.1**	**10k Availability**	Identified (within 500m)				
98	**14.2**	**Artificial and made ground (10k)**	0	1	2	3	-
100	14.3	Superficial geology (10k)	0	0	0	0	-

100	14.4	Landslip (10k)	0	0	0	0	-
101	**14.5**	**Bedrock geology (10k)**	1	0	0	0	-
102	14.6	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
103	**15.1**	**50k Availability**	Identified (within 500m)				
104	**15.2**	**Artificial and made ground (50k)**	0	1	1	4	-
105	15.3	Artificial ground permeability (50k)	0	0	-	-	-
106	15.4	Superficial geology (50k)	0	0	0	0	-
106	15.5	Superficial permeability (50k)	None (within 50m)				
106	15.6	Landslip (50k)	0	0	0	0	-
106	15.7	Landslip permeability (50k)	None (within 50m)				
107	**15.8**	**Bedrock geology (50k)**	1	0	0	0	-
108	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
108	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
109	**16.1**	**BGS Boreholes**	0	0	16	-	-
Page	Section	Natural ground subsidence					
111	**17.1**	**Shrink swell clays**	Moderate (within 50m)				
112	**17.2**	**Running sands**	Very low (within 50m)				
113	**17.3**	**Compressible deposits**	Negligible (within 50m)				
114	**17.4**	**Collapsible deposits**	Very low (within 50m)				
115	**17.5**	**Landslides**	Very low (within 50m)				
116	**17.6**	**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
118	18.1	Natural cavities	0	0	0	0	-
119	18.2	BritPits	0	0	0	0	-
119	18.3	Surface ground workings	0	0	0	-	-
119	**18.4**	**Underground workings**	0	0	0	0	14
120	18.5	Historical Mineral Planning Areas	0	0	0	0	-

120	18.6	Non-coal mining	0	0	0	0	0
120	18.7	Mining cavities	0	0	0	0	0
120	18.8	JPB mining areas	None (within 0m)				
121	18.9	Coal mining	None (within 0m)				
121	18.10	Brine areas	None (within 0m)				
121	18.11	Gypsum areas	None (within 0m)				
121	18.12	Tin mining	None (within 0m)				
121	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
122	**19.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
124	**20.1**	**BGS Estimated Background Soil Chemistry**	1	0	-	-	-
124	**20.2**	**BGS Estimated Urban Soil Chemistry**	2	2	-	-	-
125	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
126	**21.1**	**Underground railways (London)**	0	1	0	-	-
127	21.2	Underground railways (Non-London)	0	0	0	-	-
127	21.3	Railway tunnels	0	0	0	-	-
127	**21.4**	**Historical railway and tunnel features**	0	0	38	-	-
129	21.5	Royal Mail tunnels	0	0	0	-	-
129	**21.6**	**Historical railways**	0	0	2	-	-
129	**21.7**	**Railways**	0	0	45	-	-
131	21.8	Crossrail 1	0	0	0	0	-
131	21.9	Crossrail 2	0	0	0	0	-
131	**21.10**	**HS2**	0	0	2	7	-

Recent aerial photograph

Capture Date: 14/06/2021

Site Area: 0.04ha

Recent site history - 2019 aerial photograph

Capture Date: 29/06/2019

Site Area: 0.04ha

Recent site history - 2014 aerial photograph

Capture Date: 04/05/2014

Site Area: 0.04ha

Recent site history - 2011 aerial photograph

Capture Date: 30/09/2011

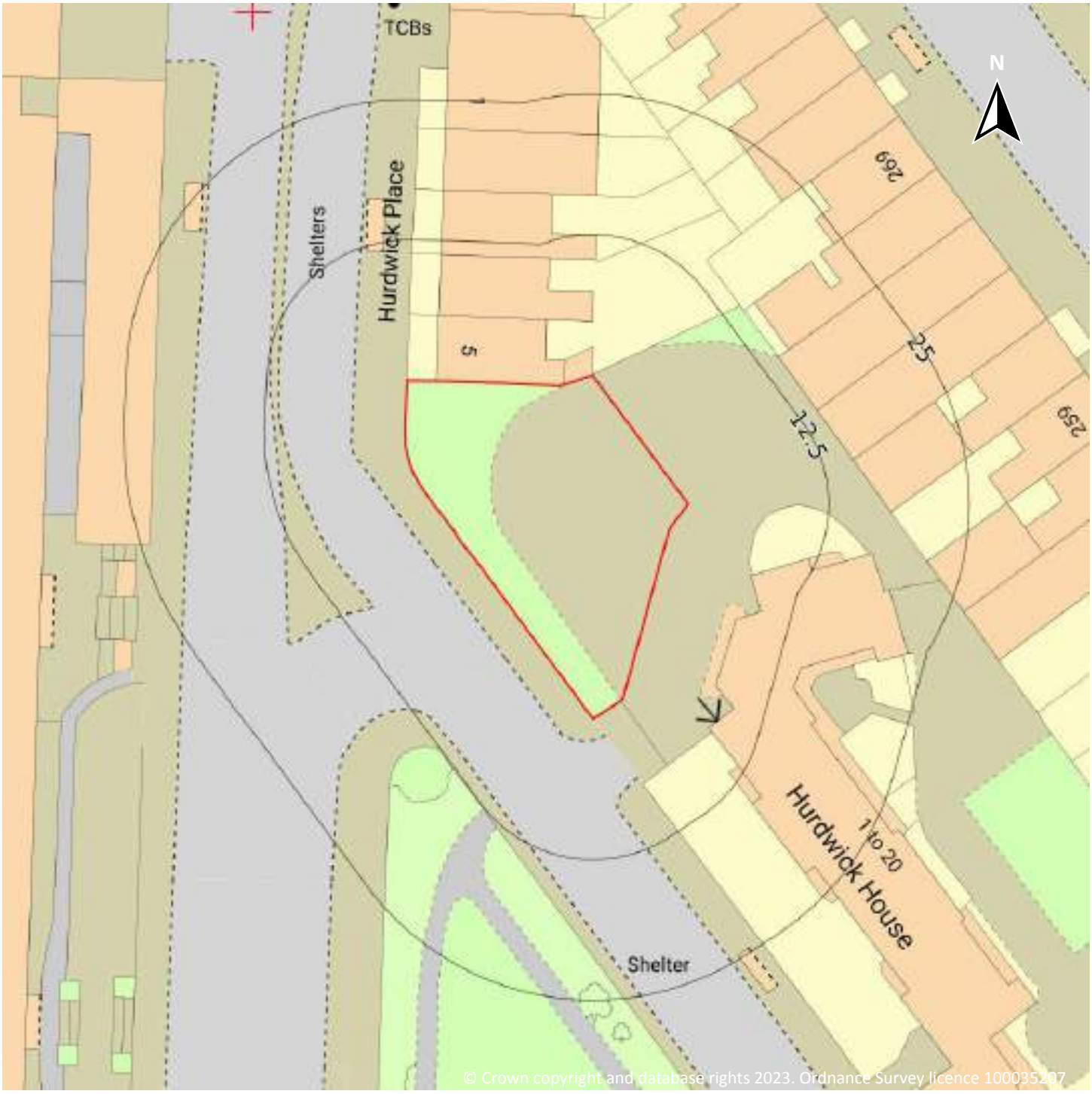
Site Area: 0.04ha

Recent site history - 1999 aerial photograph

Capture Date: 04/09/1999

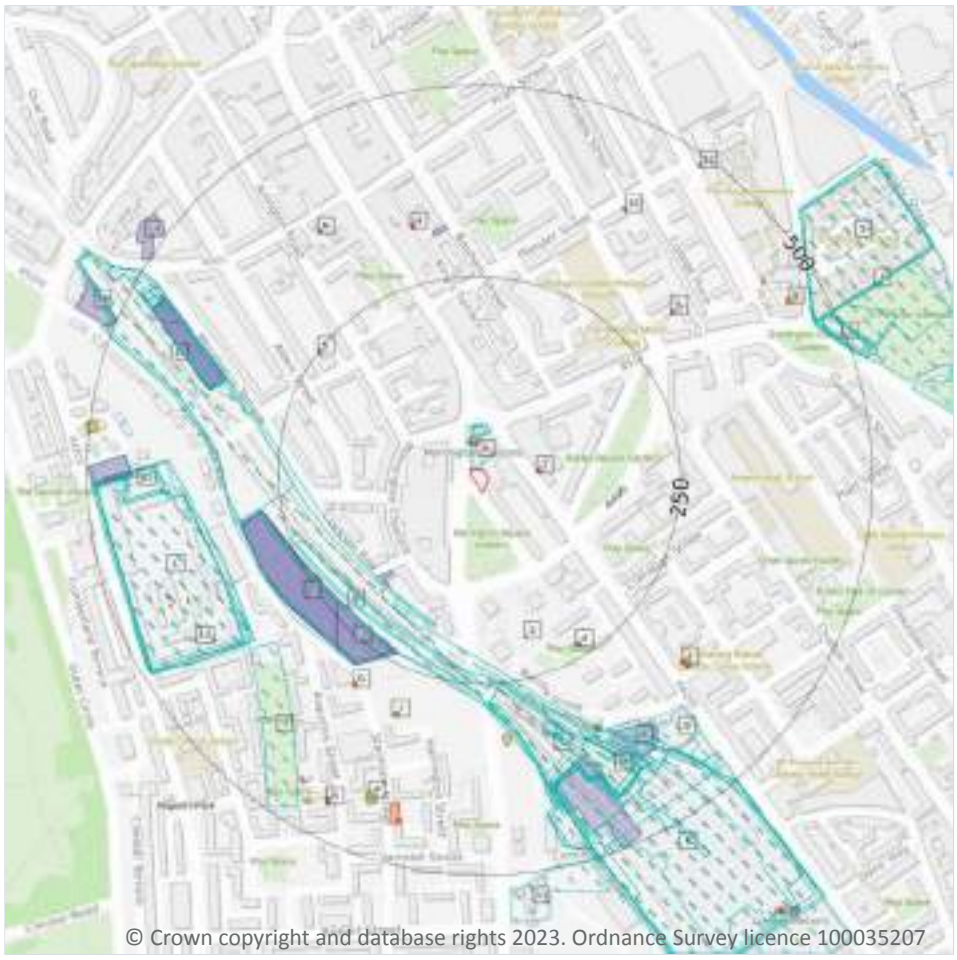
Site Area: 0.04ha

OS MasterMap site plan



Site Area: 0.04ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	55

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Electricity Railway Station**	**1948**	**2138323**

ID	Location	Land use	Dates present	Group ID
A	32m N	Unspecified Station	1920 - 1938	2210688
A	45m N	London Transport Station	1968 - 1989	2173637
B	174m SW	Railway Sidings	1957 - 1989	2177058
B	174m SW	Railway Building	1973 - 1989	2271732
B	177m SW	Railway Sidings	1948	2222100
B	181m SW	Railway Buildings	1957	2163539
C	205m SW	Railway Sidings	1894	2232992
C	209m SW	Railway Sidings	1911	2287728
D	230m W	Railway Sidings	1920 - 1938	2195023
E	231m SW	Carriage Shed	1948	2242674
E	231m SW	Carriage Shed	1957 - 1989	2292325
E	237m SW	Carriage Shed	1920 - 1938	2250287
F	247m S	Railway Sidings	1938	2221975
F	247m S	Railway Sidings	1920	2284014
C	276m S	Railway Building	1948	2149353
F	307m S	Railway Building	1968	2276010
F	310m S	Railway Buildings	1948	2163538
F	323m S	Railway Building	1894	2181761
F	324m S	Railway Building	1957	2191882
7	333m SW	Basin	1911	2164522
D	339m W	Carriage Shed	1973	2193074
K	339m SE	Railway Station	1920 - 1938	2249852
L	340m W	Cavalry Barracks	1938 - 1948	2178534
L	340m W	Barracks	1920	2252821
D	340m W	Carriage Shed	1948	2288917
D	340m W	Railway Building	1957	2149249
D	340m W	Carriage Shed	1968	2288799
D	344m W	Carriage Shed	1920 - 1938	2239494

ID	Location	Land use	Dates present	Group ID
K	344m SE	Terminus Station	1948	2170787
K	344m SE	Railway Station	1968 - 1989	2180235
K	344m SE	Terminus Station	1957	2278476
L	348m SW	Barracks	1894	2208371
M	348m S	Railway Sidings	1882	2262836
L	348m W	Barracks	1989	2228747
L	349m SW	Barracks	1957 - 1968	2213816
L	350m SW	Barracks	1911	2169517
K	356m SE	Railway Station	1882	2188108
D	367m W	Railway Building	1948	2149250
9	369m SE	Railway Building	1882	2149355
K	371m S	Railway Station	1911	2268381
K	372m S	Railway Station	1894	2268229
O	392m W	Hospital	1938 - 1948	2219571
O	402m W	Hospital	1920	2286756
P	414m S	Unspecified Tank	1968 - 1989	2195971
D	439m NW	Railway Buildings	1989	2163540
S	469m NE	Unspecified Workhouse	1882	2260124
S	470m NE	Unspecified Workhouse	1911	2218047
S	471m NE	Hospital	1957 - 1989	2198613
T	471m NE	Infirmary	1920 - 1938	2183614
U	472m NE	Unspecified Workhouse	1894	2169848
T	475m NE	Hospital	1989	2287305
T	479m NE	Hospital	1948	2190261
U	493m NE	Burial Ground	1882	2142013
13	496m S	Hospital	1894	2241487

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	19

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
B	182m SW	Unspecified Tank	1952 - 1968	411304
2	195m S	Unspecified Tank	1896	365544
I	307m S	Unspecified Tank	1991	401282
I	308m S	Unspecified Tank	1959 - 1985	399750
C	316m S	Tanks	1985	376097
L	403m W	Unspecified Tank	1990 - 1991	403285
11	416m SW	Unspecified Tank	1876	365543
P	417m S	Unspecified Tank	1969 - 1985	410270
L	423m W	Unspecified Tank	1976 - 1991	384619
O	424m W	Unspecified Tank	1976 - 1991	387645
L	425m W	Unspecified Tank	1976 - 1991	395981
M	444m S	Unspecified Tank	1952	407997
M	445m S	Unspecified Tank	1952	394562
R	445m SW	Tanks	1896 - 1916	407903
Q	448m NE	Unspecified Tank	1993	364595
L	452m W	Unspecified Tank	1976	365538
R	460m SW	Tanks	1896	376095
O	477m W	Unspecified Tank	1896	364592
O	488m W	Unspecified Tank	1962	364591

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	20

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
1	62m E	Electricity Substation	1972 - 1986	287276
4	232m SE	Electricity Substation	1972 - 1991	260302
5	246m NW	Electricity Substation	1976 - 1991	288164
G	298m SW	Electricity Substation	1972	263709
G	299m SW	Electricity Substation	1986 - 1991	264656
6	319m NE	Electricity Substation	1968 - 1994	259669
H	322m N	Electricity Substations	1984 - 1991	261768
H	323m N	Electricity Substations	1994	288486
F	337m SE	Electricity Substation	1991	271188
F	337m SE	Electricity Substation	1969 - 1985	267211
J	339m SE	Electricity Substation	1952 - 1991	260940
J	340m SE	Electricity Substation	1952	288211
N	364m NW	Electricity Substation	1971 - 1995	286668
N	365m NW	Electricity Substation	1969	265476
10	383m NE	Electricity Substation	1984 - 1991	260080
P	420m S	Electricity Substation	1969 - 1985	267776
Q	438m NE	Electricity Substation	1986 - 1993	278614
P	439m S	Electricity Substation	1970 - 1991	264130
R	439m SW	Electricity Substation	1968 - 1991	284194
12	483m NE	Electricity Substation	1968 - 1994	290118

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	21

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
B	156m SW	Garage	1986 - 1991	82421
E	231m SW	Carriage Shed	1952 - 1976	80612
E	231m SW	Carriage Shed	1916 - 1968	84397
3	231m SW	Carriage Shed	1986 - 1991	85797
E	235m SW	Carriage Shed	1971	79273
E	235m SW	Carriage Shed	1990 - 1991	85655
H	307m N	Garage	1987 - 1994	84447
D	339m W	Carriage Shed	1952 - 1968	80947
D	340m W	Carriage Shed	1971	74645
D	340m W	Carriage Shed	1916	78936
D	340m W	Carriage Shed	1976	79629
D	340m W	Carriage Shed	1952 - 1969	83325
8	356m SE	Carriage Shed	1876	74088
M	367m S	Carriage Shed	1876	74087

ID	Location	Land use	Dates present	Group ID
D	416m NW	Carriage Shed	1982	79165
O	440m W	Garage	1968	76414
O	440m W	Garage	1962	76515
O	441m W	Garages	1952	83316
O	441m W	Garage	1971	75948
14	497m NW	Garages	1952	81001
15	499m NW	Garages	1952	78579

This data is sourced from Ordnance Survey / Groundsure.

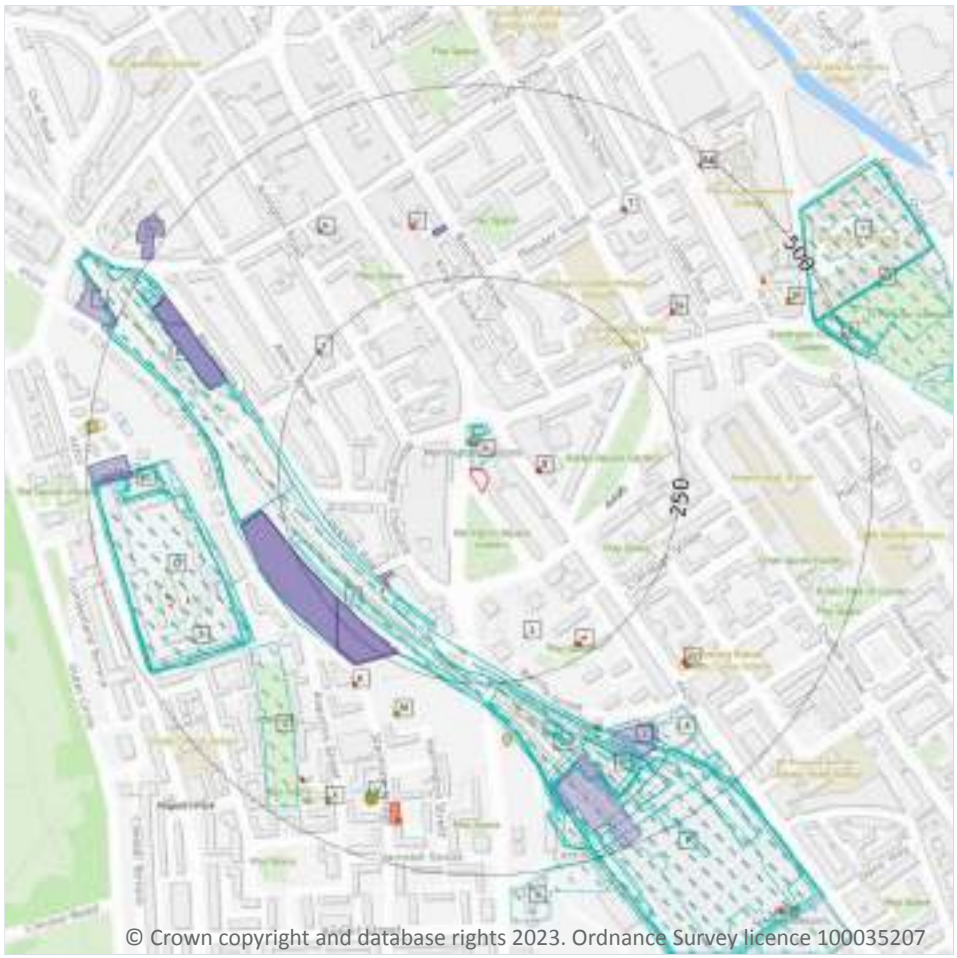
1.6 Historical military land

Records within 500m	**0**

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	80

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 21**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Electricity Railway Station**	**1948**	**2138323**
A	32m N	Unspecified Station	1920	2210688
A	32m N	Unspecified Station	1938	2210688

ID	Location	Land Use	Date	Group ID
A	45m N	London Transport Station	1968	2173637
A	45m N	London Transport Station	1973	2173637
A	45m N	London Transport Station	1989	2173637
C	174m SW	Railway Sidings	1973	2177058
C	174m SW	Railway Sidings	1989	2177058
C	174m SW	Railway Building	1989	2271732
C	174m SW	Railway Building	1973	2271732
C	177m SW	Railway Sidings	1948	2222100
C	177m SW	Railway Sidings	1968	2177058
C	177m SW	Railway Sidings	1957	2177058
C	181m SW	Railway Buildings	1957	2163539
D	205m SW	Railway Sidings	1894	2232992
D	209m SW	Railway Sidings	1911	2287728
E	230m W	Railway Sidings	1938	2195023
E	230m W	Railway Sidings	1920	2195023
G	231m SW	Carriage Shed	1968	2292325
G	231m SW	Carriage Shed	1973	2292325
G	231m SW	Carriage Shed	1989	2292325
G	231m SW	Carriage Shed	1957	2292325
G	231m SW	Carriage Shed	1948	2242674
G	237m SW	Carriage Shed	1938	2250287
G	237m SW	Carriage Shed	1920	2250287
J	247m S	Railway Sidings	1938	2221975
J	247m S	Railway Sidings	1920	2284014
D	276m S	Railway Building	1948	2149353
J	307m S	Railway Building	1968	2276010
J	310m S	Railway Buildings	1948	2163538
J	323m S	Railway Building	1894	2181761

ID	Location	Land Use	Date	Group ID
J	324m S	Railway Building	1957	2191882
2	333m SW	Basin	1911	2164522
E	339m W	Carriage Shed	1973	2193074
P	339m SE	Railway Station	1938	2249852
P	339m SE	Railway Station	1920	2249852
Q	340m W	Cavalry Barracks	1938	2178534
Q	340m W	Barracks	1920	2252821
E	340m W	Carriage Shed	1948	2288917
E	340m W	Carriage Shed	1968	2288799
E	340m W	Railway Building	1957	2149249
E	344m W	Carriage Shed	1938	2239494
E	344m W	Carriage Shed	1920	2239494
P	344m SE	Railway Station	1968	2180235
P	344m SE	Terminus Station	1957	2278476
P	344m SE	Terminus Station	1948	2170787
Q	348m SW	Barracks	1894	2208371
R	348m S	Railway Sidings	1882	2262836
Q	348m W	Barracks	1989	2228747
Q	349m SW	Barracks	1968	2213816
Q	349m SW	Barracks	1957	2213816
Q	349m SW	Cavalry Barracks	1948	2178534
Q	350m SW	Barracks	1911	2169517
P	356m SE	Railway Station	1882	2188108
E	367m W	Railway Building	1948	2149250
4	369m SE	Railway Building	1882	2149355
P	371m S	Railway Station	1911	2268381
P	372m S	Railway Station	1894	2268229
U	392m W	Hospital	1938	2219571

ID	Location	Land Use	Date	Group ID
U	401m W	Hospital	1948	2219571
U	402m W	Hospital	1920	2286756
P	412m SE	Railway Station	1973	2180235
P	412m SE	Railway Station	1989	2180235
V	414m S	Unspecified Tank	1973	2195971
V	414m S	Unspecified Tank	1968	2195971
V	414m S	Unspecified Tank	1989	2195971
E	439m NW	Railway Buildings	1989	2163540
Y	469m NE	Unspecified Workhouse	1882	2260124
Y	470m NE	Unspecified Workhouse	1911	2218047
Y	471m NE	Hospital	1973	2198613
Y	471m NE	Hospital	1968	2198613
Y	471m NE	Hospital	1989	2198613
Y	471m NE	Hospital	1957	2198613
Z	471m NE	Infirmary	1938	2183614
Z	471m NE	Infirmary	1920	2183614
AA	472m NE	Unspecified Workhouse	1894	2169848
Z	475m NE	Hospital	1989	2287305
Z	479m NE	Hospital	1948	2190261
AA	493m NE	Burial Ground	1882	2142013
6	496m S	Hospital	1894	2241487

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**34**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 21**

ID	Location	Land Use	Date	Group ID
C	182m SW	Unspecified Tank	1968	411304
C	182m SW	Unspecified Tank	1952	411304
C	182m SW	Unspecified Tank	1952	411304
C	182m SW	Unspecified Tank	1964	411304
1	195m S	Unspecified Tank	1896	365544
M	307m S	Unspecified Tank	1991	401282
M	308m S	Unspecified Tank	1985	399750
M	308m S	Unspecified Tank	1959	399750
M	308m S	Unspecified Tank	1969	399750
D	316m S	Tanks	1985	376097
Q	403m W	Unspecified Tank	1991	403285
Q	403m W	Unspecified Tank	1990	403285
5	416m SW	Unspecified Tank	1876	365543
V	417m S	Unspecified Tank	1970	410270
V	419m S	Unspecified Tank	1985	410270
V	419m S	Unspecified Tank	1969	410270
Q	423m W	Unspecified Tank	1976	384619
U	424m W	Unspecified Tank	1976	387645
Q	424m W	Unspecified Tank	1991	384619
Q	424m W	Unspecified Tank	1990	384619
Q	425m W	Unspecified Tank	1976	395981
U	425m W	Unspecified Tank	1991	387645
U	425m W	Unspecified Tank	1990	387645
Q	426m W	Unspecified Tank	1991	395981
Q	426m W	Unspecified Tank	1990	395981
R	444m S	Unspecified Tank	1952	407997
R	445m S	Unspecified Tank	1952	394562
X	445m SW	Tanks	1896	407903

ID	Location	Land Use	Date	Group ID
X	446m SW	Tanks	1916	407903
W	448m NE	Unspecified Tank	1993	364595
Q	452m W	Unspecified Tank	1976	365538
X	460m SW	Tanks	1896	376095
U	477m W	Unspecified Tank	1896	364592
U	488m W	Unspecified Tank	1962	364591

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**56**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 21**

ID	Location	Land Use	Date	Group ID
B	62m E	Electricity Substation	1986	287276
B	64m E	Electricity Substation	1972	287276
H	232m SE	Electricity Substation	1986	260302
H	232m SE	Electricity Substation	1991	260302
H	233m SE	Electricity Substation	1972	260302
I	246m NW	Electricity Substation	1990	288164
I	246m NW	Electricity Substation	1976	288164
I	246m NW	Electricity Substation	1991	288164
K	298m SW	Electricity Substation	1972	263709
K	299m SW	Electricity Substation	1986	264656
K	299m SW	Electricity Substation	1991	264656
N	319m NE	Electricity Substation	1984	259669
N	319m NE	Electricity Substation	1987	259669
N	319m NE	Electricity Substation	1991	259669

ID	Location	Land Use	Date	Group ID
N	319m NE	Electricity Substation	1968	259669
N	319m NE	Electricity Substation	1994	259669
N	320m NE	Electricity Substation	1968	259669
L	322m N	Electricity Substations	1984	261768
L	322m N	Electricity Substations	1987	261768
L	322m N	Electricity Substations	1991	261768
L	323m N	Electricity Substations	1994	288486
J	337m SE	Electricity Substation	1991	271188
J	337m SE	Electricity Substation	1970	267211
J	339m SE	Electricity Substation	1985	267211
J	339m SE	Electricity Substation	1969	267211
O	339m SE	Electricity Substation	1986	260940
O	339m SE	Electricity Substation	1991	260940
O	339m SE	Electricity Substation	1952	260940
O	340m SE	Electricity Substation	1972	260940
O	340m SE	Electricity Substation	1952	288211
S	364m NW	Electricity Substation	1971	286668
S	365m NW	Electricity Substation	1982	286668
S	365m NW	Electricity Substation	1991	286668
S	365m NW	Electricity Substation	1969	265476
S	365m NW	Electricity Substation	1995	286668
T	383m NE	Electricity Substation	1984	260080
T	383m NE	Electricity Substation	1987	260080
T	383m NE	Electricity Substation	1991	260080
V	420m S	Electricity Substation	1985	267776
V	420m S	Electricity Substation	1969	267776
W	438m NE	Electricity Substation	1993	278614
W	438m NE	Electricity Substation	1986	278614

ID	Location	Land Use	Date	Group ID
W	438m NE	Electricity Substation	1991	278614
W	438m NE	Electricity Substation	1986	278614
V	439m S	Electricity Substation	1970	264130
X	439m SW	Electricity Substation	1970	284194
X	440m SW	Electricity Substation	1968	284194
V	441m S	Electricity Substation	1991	264130
X	441m SW	Electricity Substation	1991	284194
X	441m SW	Electricity Substation	1990	284194
AB	483m NE	Electricity Substation	1984	290118
AB	483m NE	Electricity Substation	1987	290118
AB	483m NE	Electricity Substation	1991	290118
AB	484m NE	Electricity Substation	1968	290118
AB	484m NE	Electricity Substation	1968	290118
AB	485m NE	Electricity Substation	1994	290118

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	**41**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 21**

ID	Location	Land Use	Date	Group ID
C	156m SW	Garage	1986	82421
C	156m SW	Garage	1991	82421
F	231m SW	Carriage Shed	1964	80612
F	231m SW	Carriage Shed	1972	80612
G	231m SW	Carriage Shed	1968	84397
F	231m SW	Carriage Shed	1952	80612
F	231m SW	Carriage Shed	1986	85797
F	231m SW	Carriage Shed	1991	85797
F	231m SW	Carriage Shed	1952	80612
G	232m SW	Carriage Shed	1916	84397
G	235m SW	Carriage Shed	1971	79273
G	235m SW	Carriage Shed	1952	80612
G	235m SW	Carriage Shed	1976	80612
G	235m SW	Carriage Shed	1952	80612
G	235m SW	Carriage Shed	1962	80612
G	235m SW	Carriage Shed	1991	85655
G	235m SW	Carriage Shed	1990	85655
L	307m N	Garage	1987	84447
L	307m N	Garage	1991	84447
L	308m N	Garage	1994	84447
E	339m W	Carriage Shed	1968	80947
E	339m W	Carriage Shed	1952	80947
E	340m W	Carriage Shed	1916	78936
E	340m W	Carriage Shed	1971	74645
E	340m W	Carriage Shed	1976	79629
E	340m W	Carriage Shed	1952	83325
E	340m W	Carriage Shed	1962	83325
3	356m SE	Carriage Shed	1876	74088

ID	Location	Land Use	Date	Group ID
R	367m S	Carriage Shed	1876	74087
E	416m NW	Carriage Shed	1952	83325
E	416m NW	Carriage Shed	1969	83325
E	416m NW	Carriage Shed	1952	83325
E	416m NW	Carriage Shed	1982	79165
U	440m W	Garage	1968	76414
U	440m W	Garage	1962	76515
U	441m W	Garages	1952	83316
U	441m W	Garages	1952	83316
U	441m W	Garage	1971	75948
AC	497m NW	Garages	1952	81001
AC	497m NW	Garages	1952	81001
7	499m NW	Garages	1952	78579

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

Site Outline

Search buffers in metres (m)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	3

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 31**

ID	Location	Address	Further Details	Date
E	344m N	Site Address: N/A	Type of Site: Scrap Metal Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1984
E	344m N	Site Address: N/A	Type of Site: Scrap Metal Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1968
E	344m N	Site Address: N/A	Type of Site: Scrap Metal Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1968

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	1

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 31**

ID	Location	Details		
8	484m NE	Site Name: Arbuckle, St Pancras Way Site Address: William Arbuckle, 7, St Pancras Way, London, NW1 0PB Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ARB001 EPR reference: EA/EPR/EP3491NW/A001 Operator: Arbuckle William David Waste Management licence No: 80302 Annual Tonnage: 1014	Issue Date: 05/06/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	52

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 31**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	32m N	275, EVERSHOLT STREET, LONDON, NW1 1BA	WEX271560	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	59m SW	for British Heart Foundation	EPR/CE5143PN/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
A	60m SW	GREATER LONDON HOUSE, 180 HAMPSTEAD ROAD, LONDON, NW1 7AW	WEX092868	Storing waste exemption	Not on a farm	Storage of waste in a secure place
2	179m SW	-	WEX289686	Using waste exemption	Not on a farm	Use of waste in construction

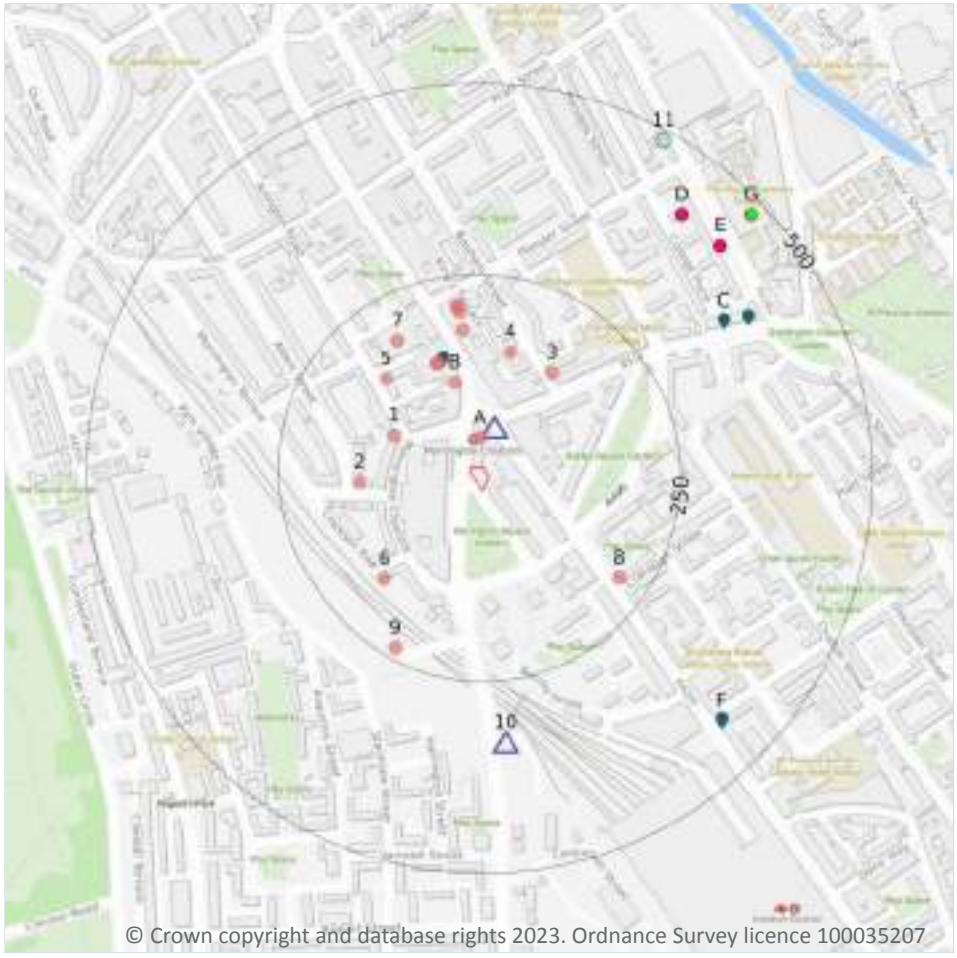
ID	Location	Site	Reference	Category	Sub-Category	Description
B	258m SW	Eskdale, Regents Park Estate, Camden, London, NW13SA	WEX242769	Using waste exemption	Not on a farm	Use of waste in construction
B	258m SW	EUSTON DOWN SIDE SHED, GRANBY TERRACE, LONDON, NW1 3SA	WEX102999	Using waste exemption	Not on a farm	Use of waste in construction
C	260m NW	67 Camden High Street LONDON NW1 7JL	EPR/DE5982QH/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
C	261m NW	67, CAMDEN HIGH STREET, LONDON, NW1 7JL	WEX088384	Storing waste exemption	Not on a farm	Storage of waste in a secure place
3	273m E	155, CHALTON STREET, LONDON, NW1 1NR	WEX246479	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	281m SW	-	WEX285764	Treating waste exemption	Not on a farm	Manual treatment of waste
B	281m SW	-	WEX285764	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
B	281m SW	-	WEX285764	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	281m SW	-	WEX285764	Using waste exemption	Not on a farm	Use of waste for a specified purpose
B	281m SW	-	WEX285764	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	281m SW	-	WEX285764	Using waste exemption	Not on a farm	Use of waste in construction
B	281m SW	-	WEX285764	Using waste exemption	Not on a farm	Spreading waste on agricultural land to confer benefit
B	281m SW	-	WEX285764	Using waste exemption	Not on a farm	Spreading waste on non-agricultural land to confer benefit
B	281m SW	-	WEX285764	Using waste exemption	Not on a farm	Use of mulch
B	281m SW	-	WEX285764	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
B	281m SW	-	WEX285764	Treating waste exemption	Not on a farm	Screening and blending of waste

ID	Location	Site	Reference	Category	Sub-Category	Description
B	281m SW	-	WEX285764	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
4	319m N	67-72 PLENDER STREET CAMDEN NW10LD	EPR/YF0331JS/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
D	335m S	-	WEX285766	Using waste exemption	Not on a farm	Use of waste for a specified purpose
D	335m S	-	WEX285766	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	335m S	-	WEX285766	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	335m S	-	WEX285766	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
D	335m S	-	WEX285766	Treating waste exemption	Not on a farm	Manual treatment of waste
D	335m S	-	WEX285766	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	335m S	-	WEX285766	Treating waste exemption	Not on a farm	Screening and blending of waste
D	335m S	-	WEX285766	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
D	335m S	-	WEX285766	Using waste exemption	Not on a farm	Use of mulch
D	335m S	-	WEX285766	Using waste exemption	Not on a farm	Spreading waste on non-agricultural land to confer benefit
D	335m S	-	WEX285766	Using waste exemption	Not on a farm	Spreading waste on agricultural land to confer benefit
D	335m S	-	WEX285766	Using waste exemption	Not on a farm	Use of waste in construction
D	337m S	110 Hampstead road, Euston, London, NW1 2PT	WEX144417	Using waste exemption	Not on a farm	Use of waste in construction
5	373m SE	EUSTON STATION PARCEL DECK, BARNBY STREET, LONDON, NW1 2RS	WEX116146	Treating waste exemption	Not on a farm	Treatment of waste aerosol cans

ID	Location	Site	Reference	Category	Sub-Category	Description
6	431m NW	139 Camden High Street LONDON NW1 7JR	EPR/HH0214AX/A001	Treating waste exemption	Non-Agricultural Waste Only	Sorting and de-naturing of controlled drugs for disposal
7	451m S	-	WEX264412	Using waste exemption	Not on a farm	Use of waste in construction
F	482m W	-	WEX285806	Treating waste exemption	Not on a farm	Manual treatment of waste
F	482m W	-	WEX285806	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	482m W	-	WEX285806	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
F	482m W	-	WEX285806	Using waste exemption	Not on a farm	Use of mulch
F	482m W	-	WEX285806	Using waste exemption	Not on a farm	Spreading waste on non-agricultural land to confer benefit
F	482m W	-	WEX285806	Using waste exemption	Not on a farm	Spreading waste on agricultural land to confer benefit
F	482m W	-	WEX285806	Using waste exemption	Not on a farm	Use of waste for a specified purpose
F	482m W	-	WEX285806	Using waste exemption	Not on a farm	Use of waste in construction
F	482m W	-	WEX285806	Treating waste exemption	Not on a farm	Screening and blending of waste
F	482m W	-	WEX285806	Storing waste exemption	Not on a farm	Storage of waste in a secure place
F	482m W	-	WEX285806	Storing waste exemption	Not on a farm	Storage of waste in secure containers
F	482m W	-	WEX285806	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
G	490m NE	4, ROYAL COLLEGE STREET, LONDON, NW1 0TU	WEX284533	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
G	490m NE	4, ROYAL COLLEGE STREET, LONDON, NW1 0TU	WEX146616	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Current or recent petrol stations

Licensed pollutant release (Part A(2)/B)

Radioactive Substance Authorisations

Pollution Incidents (EA/NRW)

Pollution inventory radioactive waste

4.1 Recent industrial land uses

Records within 250m	**17**

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Company	Address	Activity	Category
A	38m N	Mornington Crescent	Mornington Crescent Station, Millbrook Place, London, Greater London, NW1 2JA	Underground Network Stations	Public Transport, Stations and Infrastructure
1	107m NW	L D Clearance Service	Flat 9 Mornington Court, Mornington Crescent, London, Greater London, NW1 7RD	Clearance and Salvage Dealers	Recycling Services

ID	Location	Company	Address	Activity	Category
B	112m N	Nicholas Camera Co	15, Camden High Street, London, Greater London, NW1 7JE	Photographic and Optical Equipment	Household, Office, Leisure and Garden
B	142m N	Tetragon Publishing Services	37, Camden High Street, London, Greater London, NW1 7JE	Published Goods	Industrial Products
B	142m N	Works	Greater London, NW1	Unspecified Works Or Factories	Industrial Features
2	144m W	Cecil Woolf Publishers	1, Mornington Place, London, Greater London, NW1 7RP	Published Goods	Industrial Products
3	153m NE	Thames Tyres Ltd	2, Bayham Street, London, Greater London, NW1 0ES	Vehicle Parts and Accessories	Motoring
4	154m N	Works	Greater London, NW1	Unspecified Works Or Factories	Industrial Features
5	159m NW	The Bulb of London	Cobden House, Arlington Road, London, Greater London, NW1 7LL	Published Goods	Industrial Products
6	173m SW	Globe Motors	12a, Mornington Crescent, London, Greater London, NW1 7RH	Vehicle Repair, Testing and Servicing	Repair and Servicing
B	179m N	London Hearing Specialist	32-36, Camden High Street, London, Greater London, NW1 0JH	Special Purpose Machinery and Equipment	Industrial Products
7	191m NW	Works	Greater London, NW1	Unspecified Works Or Factories	Industrial Features
B	204m N	T S T Cars	25, King's Terrace, London, Greater London, NW1 0JP	Vehicle Hire and Rental	Hire Services
B	209m N	City Images	23-27, King's Terrace, London, Greater London, NW1 0JP	Published Goods	Industrial Products
8	210m SE	Camden Scaffolding	188, Eversholt Street, London, Greater London, NW1 1BJ	Construction and Tool Hire	Hire Services
B	211m N	Printstyle Ltd	25, King's Terrace, London, Greater London, NW1 0JP	Published Goods	Industrial Products
9	235m SW	Electricity Sub Station	Greater London, NW1	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	2

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Company	Address	LPG	Status
A	54m N	OBSOLETE	47, Mornington Crescent, Regents Park, London, Inner London, NW1 7RB	Not Applicable	Obsolete
10	330m S	BP	142, Hampstead Road, Regents Park, London, Inner London, NW1 2PT	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	6

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Address	Details	
B	144m N	Camden Dry Cleaners, 27 Camden High Street, NW1 7JE	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
B	144m N	Camden Dry Cleaners, 27 Camden High Street, NW1 7JE	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
C	365m NE	Crowndale Dry Cleaners, 2 Crowndale Road, NW1 1TT	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
C	395m NE	Crowndale Dry Cleaners, 2 Crowndale Road, NW1 1TT	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
F	431m SE	City Centre Dry Cleaners, 118 Eversholt Street, NW1 1BP	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
F	431m SE	City Centre Dry Cleaners, 118 Eversholt Street, NW1 1BP	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m **16**

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Address	Details	
D	419m NE	Camden Campus,Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: CC7501 Date of approval: 05/08/2008	Effective from: 05/08/2008 Last date of update: 01/01/2020 Status: Issued
D	419m NE	Camden Campus,Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: CC8028 Date of approval: 27/01/2009	Effective from: 24/02/2009 Last date of update: 01/01/2020 Status: Issued

ID	Location	Address	Details	
E	423m NE	Royal College Street, London, NW1 0TU	Operator: Proxima Concepts Limited Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BR9618 Date of approval: 05/09/2002	Effective from: 03/10/2002 Last date of update: 01/01/2020 Status: Issued
E	423m NE	Royal Veterinary College, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AE5268 Date of approval: 24/05/2006	Effective from: 24/05/2006 Last date of update: 01/01/2015 Status: Superseded By Variation
E	423m NE	Royal Veterinary College, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AE5241 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled
E	423m NE	Royal Veterinary College, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AE5250 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled
E	423m NE	Royal Veterinary College, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AE5268 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Superseded By Variation
E	423m NE	Gene Expression Technologies Ltd (dissolved), Royal College Street, London, NW1 0TU	Operator: Gene Expression Technologies Ltd (dissolved) Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: BT4478 Date of approval: 25/11/2002	Effective from: 25/11/2002 Last date of update: 01/01/2015 Status: Revoked/cancelled
E	423m NE	Spirogen Ltd, London Bioscience Innovation Centre,2 Royal College Street, London, NW1 0TU	Operator: Spirogen Ltd Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: CA5052 Date of approval: 20/12/2006	Effective from: 20/12/2006 Last date of update: 01/01/2015 Status: Revoked/cancelled
E	423m NE	Spirogen Ltd, London Bioscience Innovation Centre, 2 Royal College Street, London, NW1 0TU	Operator: Spirogen Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: CA5079 Date of approval: 20/12/2006	Effective from: 20/12/2006 Last date of update: 01/01/2015 Status: Revoked/cancelled

ID	Location	Address	Details	
E	423m NE	Gene Expression Technologies Ltd (dissolved), Royal College Street, London, NW1 0TU	Operator: Gene Expression Technologies Ltd (dissolved) Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BT4460 Date of approval: 25/11/2002	Effective from: 23/12/2002 Last date of update: 01/01/2015 Status: Revoked/cancelled
E	423m NE	Royal College Street, London, NW1 0TU	Operator: Proxima Concepts Limited Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: BR9600 Date of approval: 05/09/2002	Effective from: 05/09/2002 Last date of update: 01/01/2020 Status: Issued
G	480m NE	Royal Veterinary College, University Of London, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AQ1510 Date of approval: 28/03/1995	Effective from: 25/04/1995 Last date of update: 01/01/2015 Status: Superseded By Variation
G	480m NE	Royal Veterinary College, University Of London, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AQ1510 Date of approval: 09/06/2000	Effective from: 12/06/2000 Last date of update: 01/01/2015 Status: Superseded By Variation
G	480m NE	Royal Veterinary College, University Of London, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AQ1510 Date of approval: 01/12/2003	Effective from: 01/01/2004 Last date of update: 01/01/2015 Status: Superseded By Variation
G	480m NE	Royal Veterinary College, University Of London, Royal College Street, London, NW1 0TU	Operator: Royal Veterinary College Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AQ1510 Date of approval: 11/11/2005	Effective from: 09/12/2005 Last date of update: 01/01/2015 Status: Superseded By Variation

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	**0**

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 38**

ID	Location	Details	
11	486m NE	Incident Date: 19/01/2002 Incident Identification: 53408 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory radioactive waste

Records within 500m	1

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on **page 38**

ID: G, Location: 480m NE, Permit: AQ1510
Operator: ROYAL VETERINARY COLLEGE
Address: UNIVERSITY OF LONDON ROYAL COLLEGE STREET LONDON NW1 0TU
Releases:

Route	Substance	Quantity released
Wastewater	Tritium	0Bq -
Wastewater	Carbon 14	0Bq -
Wastewater	Total Beta/Gamma (Excl Tritium)	0Bq -

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer

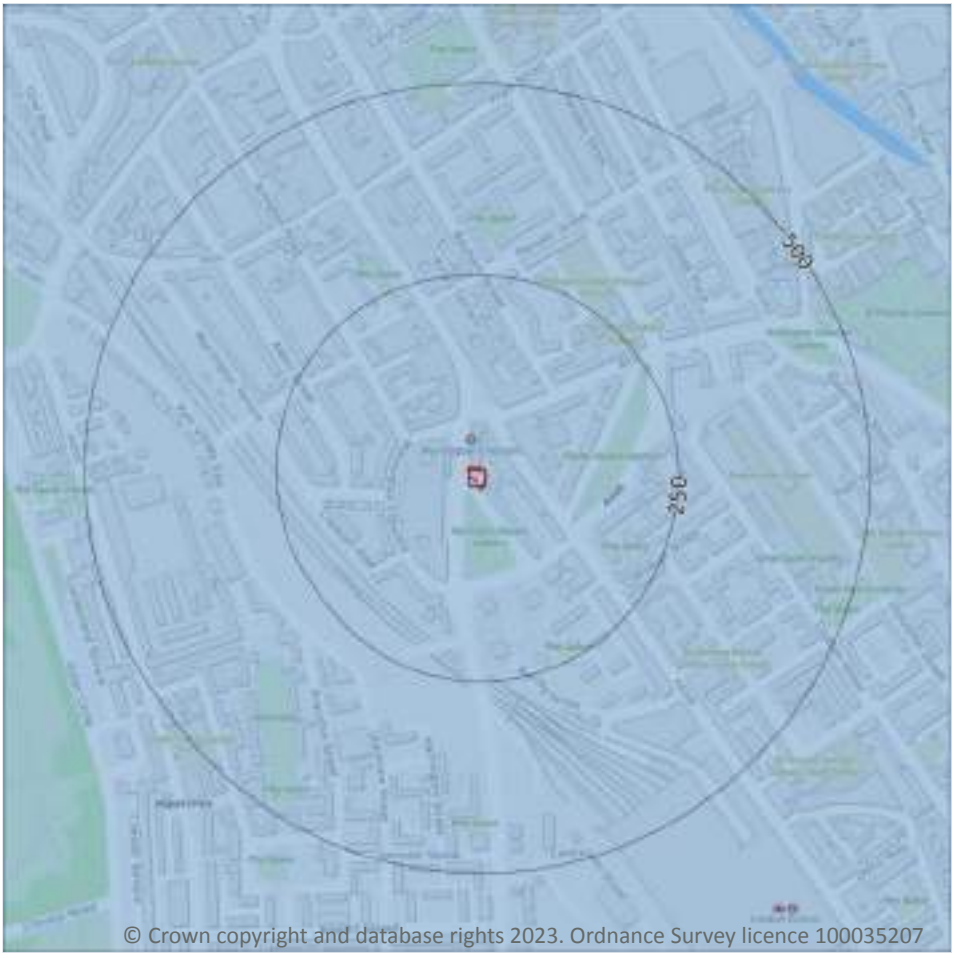
5.1 Superficial aquifer

Records within 500m	0

Aquifer status of groundwater held within superficial geology.

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	1

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 49**

ID	Location	Designation	Description
1	**On site**	**Unproductive**	**These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow**

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability

Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	1

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 50**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	**Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed**

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site	0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	53

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 52**

ID	Location	Details	
-	1027m SE	Status: Historical Licence No: TH/039/0039/001 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BIDBOROUGH HOUSE 20 MABLEDON PLACE LONDON Data Type: Point Name: LONDON BOROUGH OF CAMDEN Easting: 530052 Northing: 182718	Annual Volume (m^3): 327600 Max Daily Volume (m^3): 1260 Original Application No: - Original Start Date: 09/04/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 09/04/2009 Version End Date: -
-	1027m SE	Status: Historical Licence No: TH/039/0039/001 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BIDBOROUGH HOUSE 20 MABLEDON PLACE LONDON Data Type: Point Name: LONDON BOROUGH OF CAMDEN Easting: 530052 Northing: 182718	Annual Volume (m^3): 327600 Max Daily Volume (m^3): 1260 Original Application No: - Original Start Date: 09/04/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 09/04/2009 Version End Date: -
-	1027m SE	Status: Historical Licence No: TH/039/0039/064 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BIDBOROUGH HOUSE, 20 MABLEDON PLACE, LONDON Data Type: Point Name: University College London Easting: 530052 Northing: 182718	Annual Volume (m^3): 327600 Max Daily Volume (m^3): 1440 Original Application No: - Original Start Date: 16/04/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 21/11/2014 Version End Date: -
-	1027m SE	Status: Active Licence No: TH/039/0039/064/R01 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BIDBOROUGH HOUSE, 20 MABLEDON PLACE, LONDON Data Type: Point Name: University College London Easting: 530052 Northing: 182718	Annual Volume (m^3): 327,600 Max Daily Volume (m^3): 1,440 Original Application No: NPS/WR/026770 Original Start Date: 24/05/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 24/05/2019 Version End Date: -

ID	Location	Details	
-	1031m NE	Status: Historical Licence No: 28/39/39/0222 Details: General Use Relating To Secondary Category (High Loss) Direct Source: THAMES GROUNDWATER Point: KINGS CROSS CONCRETE PLANT-BOREHOLE Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 529920 Northing: 184040	Annual Volume (m^3): 55200 Max Daily Volume (m^3): 200 Original Application No: - Original Start Date: 31/08/2006 Expiry Date: 31/03/2010 Issue No: 1 Version Start Date: 31/08/2006 Version End Date: -
-	1031m NE	Status: Historical Licence No: TH/039/0039/027 Details: General Use Relating To Secondary Category (High Loss) Direct Source: THAMES GROUNDWATER Point: KINGS CROSS CONCRETE PLANT-BOREHOLE Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 529920 Northing: 184040	Annual Volume (m^3): 33400 Max Daily Volume (m^3): 200 Original Application No: - Original Start Date: 21/04/2010 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 13/08/2012 Version End Date: -
-	1031m NE	Status: Active Licence No: TH/039/0039/027/R01 Details: General Use Relating To Secondary Category (High Loss) Direct Source: THAMES GROUNDWATER Point: KINGS CROSS CONCRETE PLANT-BOREHOLE Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 529920 Northing: 184040	Annual Volume (m^3): 33,400 Max Daily Volume (m^3): 200 Original Application No: NPS/WR/026760 Original Start Date: 25/04/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 25/04/2019 Version End Date: -
-	1031m NE	Status: Active Licence No: TH/039/0039/027/R01 Details: Dust Suppression Direct Source: THAMES GROUNDWATER Point: KINGS CROSS CONCRETE PLANT-BOREHOLE Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 529920 Northing: 184040	Annual Volume (m^3): 33,400 Max Daily Volume (m^3): 200 Original Application No: NPS/WR/026760 Original Start Date: 25/04/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 25/04/2019 Version End Date: -
-	1031m NE	Status: Active Licence No: TH/039/0039/027/R01 Details: General Washing/Process Washing Direct Source: THAMES GROUNDWATER Point: KINGS CROSS CONCRETE PLANT-BOREHOLE Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 529920 Northing: 184040	Annual Volume (m^3): 33,400 Max Daily Volume (m^3): 200 Original Application No: NPS/WR/026760 Original Start Date: 25/04/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 25/04/2019 Version End Date: -

ID	Location	Details	
-	1079m SE	Status: Historical Licence No: TH/039/0039/131 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: UCL BOREHOLE A1 Data Type: Point Name: University College London Easting: 529637 Northing: 182298	Annual Volume (m^3): 162000 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 17/05/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 17/05/2019 Version End Date: -
-	1079m SE	Status: Active Licence No: TH/039/0039/131 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: UCL BOREHOLE A1 Data Type: Point Name: University College London Easting: 529637 Northing: 182298	Annual Volume (m^3): 162,000 Max Daily Volume (m^3): 2,160 Original Application No: NPS/WR/029399 Original Start Date: 17/05/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 17/05/2019 Version End Date: -
-	1090m SE	Status: Historical Licence No: TH/039/0039/131 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: UCL BOREHOLE A2 Data Type: Point Name: University College London Easting: 529643 Northing: 182288	Annual Volume (m^3): 162000 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 17/05/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 17/05/2019 Version End Date: -
-	1090m SE	Status: Active Licence No: TH/039/0039/131 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: UCL BOREHOLE A2 Data Type: Point Name: University College London Easting: 529643 Northing: 182288	Annual Volume (m^3): 162,000 Max Daily Volume (m^3): 2,160 Original Application No: NPS/WR/029399 Original Start Date: 17/05/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 17/05/2019 Version End Date: -
-	1169m E	Status: Active Licence No: TH/039/0039/055 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: REGENT QUARTER - BOREHOLE A Data Type: Point Name: BNP Paribas Jersey Trust Corp Ltd and Anley Trustees Ltd Easting: 530368 Northing: 183294	Annual Volume (m^3): 323,612 Max Daily Volume (m^3): 2,160 Original Application No: NPS/WR/015663 Original Start Date: 06/02/2013 Expiry Date: 31/03/2025 Issue No: 2 Version Start Date: 25/06/2014 Version End Date: -

ID	Location	Details	
-	1177m W	Status: Historical Licence No: 28/39/39/0035 Details: Animal Watering & General Use in non Farming situations Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT REGENT'S PARK, LONDON NW1 Data Type: Point Name: ZOOLOGICAL SOCIETY OF LONDON Easting: 528000 Northing: 183400	Annual Volume (m^3): 681.9 Max Daily Volume (m^3): 59 Original Application No: - Original Start Date: 04/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 04/04/1966 Version End Date: -
-	1315m SW	Status: Historical Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: CONFINED CHALK, DORIC VILLA, YORK TERRACE EAST, LONDON Data Type: Point Name: Ritblat Easting: 528407 Northing: 182223	Annual Volume (m^3): 118260 Max Daily Volume (m^3): 324 Original Application No: - Original Start Date: 26/02/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 26/02/2010 Version End Date: -
-	1315m SW	Status: Historical Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: DORIC VILLA, YORK TERRACE EAST, LONDON Data Type: Point Name: Ritblat Easting: 528407 Northing: 182223	Annual Volume (m^3): 118260 Max Daily Volume (m^3): 324 Original Application No: - Original Start Date: 26/02/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 26/02/2010 Version End Date: -
-	1315m SW	Status: Active Licence No: TH/039/0039/022/R01 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: DORIC VILLA, YORK TERRACE EAST, LONDON Data Type: Point Name: Ritblat Easting: 528407 Northing: 182223	Annual Volume (m^3): 118,260 Max Daily Volume (m^3): 324 Original Application No: NPS/WR/026758 Original Start Date: 01/04/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2019 Version End Date: -
-	1424m S	Status: Active Licence No: TH/039/0039/186 Details: Dewatering Direct Source: THAMES GROUNDWATER Point: BEDFORD BASEMENT DEWATERING AREA Data Type: Poly4 Name: Modebest Builders Limited Easting: 529256 Northing: 181836	Annual Volume (m^3): 22,328 Max Daily Volume (m^3): 259 Original Application No: NPS/WR/036408 Original Start Date: 27/05/2022 Expiry Date: 31/03/2023 Issue No: 1 Version Start Date: 27/05/2022 Version End Date: -

ID	Location	Details	
-	1426m S	Status: Historical Licence No: TH/039/0039/010 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 10 WEYMOUTH STREET, RIDGEFORD PROPERTIES Data Type: Point Name: Ridgeford Properties Limited Easting: 528830 Northing: 181900	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 400 Original Application No: - Original Start Date: 13/08/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 13/08/2009 Version End Date: -
-	1426m S	Status: Active Licence No: TH/039/0039/068 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 10 WEYMOUTH STREET, RIDGEFORD PROPERTIES Data Type: Point Name: Ridgeford Properties Limited Easting: 528830 Northing: 181900	Annual Volume (m^3): 50,000 Max Daily Volume (m^3): 400 Original Application No: NPSWR009221 Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1438m N	Status: Historical Licence No: 28/39/39/0091 Details: Laundry Use Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -
-	1438m N	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -

ID	Location	Details	
-	1438m N	Status: Historical Licence No: 28/39/39/0091 Details: Process Water Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -
-	1438m N	Status: Active Licence No: 28/39/39/0091 Details: Process Water Direct Source: THAMES GROUNDWATER Point: KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LIMITED Easting: 528800 Northing: 184700	Annual Volume (m^3): 17,997 Max Daily Volume (m^3): 604.60 Original Application No: NPS/WR/010565 Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/05/2012 Version End Date: -
-	1438m N	Status: Active Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LIMITED Easting: 528800 Northing: 184700	Annual Volume (m^3): 17,997 Max Daily Volume (m^3): 604.60 Original Application No: NPS/WR/010565 Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/05/2012 Version End Date: -
-	1525m SW	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 3-5 DEVONSHIRE PLACE-BOREHOLE A Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED Easting: 528480 Northing: 181930	Annual Volume (m^3): 122400 Max Daily Volume (m^3): 511 Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date: -

ID	Location	Details	
-	1534m SW	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 20 DEVONSHIRE PLACE, LONDON-BOREHOLE A Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED Easting: 528480 Northing: 181920	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date: -
-	1535m SW	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 3-5 DEVONSHIRE PLACE-BOREHOLE B Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED Easting: 528460 Northing: 181930	Annual Volume (m^3): 122400 Max Daily Volume (m^3): 511 Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date: -
-	1548m SW	Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 20 DEVONSHIRE PLACE, LONDON-BOREHOLE B Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED Easting: 528470 Northing: 181910	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date: -
-	1565m SE	Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE 2, KEPPEL STREET Data Type: Point Name: London School of Hygiene and Tropical Medicine Easting: 529858 Northing: 181865	Annual Volume (m^3): 203407 Max Daily Volume (m^3): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 08/11/2010 Version End Date: -
-	1565m SE	Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: KEPPEL STREET, BLOOMSBURY, LONDON - BOREHOLE 2 Data Type: Point Name: London School of Hygiene and Tropical Medicine Easting: 529858 Northing: 181865	Annual Volume (m^3): 203407 Max Daily Volume (m^3): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 01/04/2011 Version End Date: -

ID	Location	Details	
-	1565m SE	Status: Active Licence No: TH/039/0039/031/R01 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: KEPPEL STREET, BLOOMSBURY, LONDON - BOREHOLE 2 Data Type: Point Name: London School of Hygiene and Tropical Medicine Easting: 529858 Northing: 181865	Annual Volume (m^3): 203,407 Max Daily Volume (m^3): 558 Original Application No: NPS/WR/026763 Original Start Date: 04/04/2019 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 04/04/2019 Version End Date: -
-	1567m SE	Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE 1, KEPPEL STREET Data Type: Point Name: London School of Hygiene and Tropical Medicine Easting: 529860 Northing: 181863	Annual Volume (m^3): 203407 Max Daily Volume (m^3): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 08/11/2010 Version End Date: -
-	1567m SE	Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: KEPPEL STREET, BLOOMSBURY, LONDON - BOREHOLE 1 Data Type: Point Name: London School of Hygiene and Tropical Medicine Easting: 529860 Northing: 181863	Annual Volume (m^3): 203407 Max Daily Volume (m^3): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 01/04/2011 Version End Date: -
-	1567m SE	Status: Active Licence No: TH/039/0039/031/R01 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: KEPPEL STREET, BLOOMSBURY, LONDON - BOREHOLE 1 Data Type: Point Name: London School of Hygiene and Tropical Medicine Easting: 529860 Northing: 181863	Annual Volume (m^3): 203,407 Max Daily Volume (m^3): 558 Original Application No: NPS/WR/026763 Original Start Date: 04/04/2019 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 04/04/2019 Version End Date: -

ID	Location	Details	
-	1579m W	Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 26/09/2002 Expiry Date: 31/03/2007 Issue No: 1 Version Start Date: 26/09/2002 Version End Date: -
-	1579m W	Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 01/04/2007 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 01/04/2007 Version End Date: -
-	1585m W	Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARROW HILL Data Type: Point Name: Thames Water Utilities Ltd Easting: 527636 Northing: 183697	Annual Volume (m^3): 631,000 Max Daily Volume (m^3): 2,000 Original Application No: NPS/WR/009229 Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1785m SW	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: ABBEY HOUSE, BAKER STREET- BOREHOLE Data Type: Point Name: BASKERVILLE ESTATES (GP) LIMITED Easting: 527850 Northing: 182100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 102 Version Start Date: 19/12/2003 Version End Date: -
-	1823m SW	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT ABBEY HOUSE, BAKER STREET, LONDON NW1 Data Type: Point Name: ABBEY NATIONAL PLC Easting: 527800 Northing: 182100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 02/05/2000 Version End Date: -

ID	Location	Details	
-	1862m E	Status: Historical Licence No: 28/39/39/0207 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARNARD PARK, ISLINGTON - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 531020 Northing: 183690	Annual Volume (m^3): 914544 Max Daily Volume (m^3): 3024 Original Application No: - Original Start Date: 02/05/2003 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 08/01/2004 Version End Date: -
-	1862m E	Status: Active Licence No: TH/039/0039/057 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARNARD PARK Data Type: Point Name: Thames Water Utilities Ltd Easting: 531022 Northing: 183681	Annual Volume (m^3): 914,544 Max Daily Volume (m^3): 3,024 Original Application No: NPS/WR/009227 Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1882m W	Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT ABBEY LODGE, PARK ROAD, LONDON NW8 Data Type: Point Name: WOOD MANAGEMENT TRUSTEES LTD Easting: 527420 Northing: 182620	Annual Volume (m^3): 28640 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/11/1991 Version End Date: -
-	1882m W	Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: ABBEY LODGE, PARK ROAD, LONDON NW8-TWO BOREHOLES Data Type: Point Name: ABBEY LODGE RTM COMPANY LIMITED Easting: 527420 Northing: 182620	Annual Volume (m^3): 28,640 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/06/2006 Version End Date: -

ID	Location	Details	
-	1882m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529100 Northing: 181400	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -
-	1882m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE B Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529100 Northing: 181400	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -
-	1890m SW	Status: Historical Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT DORSET HOUSE, GLOUCESTER PLACE, LONDON. W1 Data Type: Point Name: BELLNORTH LIMITED Easting: 527800 Northing: 182000	Annual Volume (m^3): 56370 Max Daily Volume (m^3): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 101 Version Start Date: 10/01/1994 Version End Date: -
-	1890m SW	Status: Active Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: DORSET HOUSE, LONDON- 2 BOREHOLES Data Type: Point Name: Dorset House Residential Limited Easting: 527800 Northing: 182000	Annual Volume (m^3): 56,370 Max Daily Volume (m^3): 318 Original Application No: NPS/WR/034692 Original Start Date: 13/12/1965 Expiry Date: - Issue No: 104 Version Start Date: 18/11/2020 Version End Date: -

ID	Location	Details	
-	1938m S	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'A' Data Type: Point Name: Pontsarn Investments Limited Easting: 529010 Northing: 181350	Annual Volume (m^3): 9,126 Max Daily Volume (m^3): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: 29/11/2012 Version End Date: -
-	1958m S	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'B' Data Type: Point Name: Pontsarn Investments Limited Easting: 529010 Northing: 181330	Annual Volume (m^3): 9,126 Max Daily Volume (m^3): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: 29/11/2012 Version End Date: -
-	1989m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529000 Northing: 181300	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -
-	1989m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE A Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529000 Northing: 181300	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	5

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 52**

ID	Location	Details	
A	627m NE	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: THAMES SURFACE WATER - NON TIDAL Point: CAMLEY STREET NATURE PARK, LONDON Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 529750 Northing: 183600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 18/09/1991 Version End Date: -
A	627m NE	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: THAMES SURFACE WATER - NON TIDAL Point: GRAND UNION CANAL AT CAMLEY STREET NATURE PARK, LONDON Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 529750 Northing: 183600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/09/1991 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1991 Version End Date: -
-	978m NW	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: SOUTHAMPTON BRIDGE, LONDON, NW8 - REGENTS CANAL Data Type: Point Name: Canal and River Trust Easting: 528500 Northing: 184020	Annual Volume (m^3): 7,010,000 Max Daily Volume (m^3): 19,520 Original Application No: - Original Start Date: 18/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 17/12/2007 Version End Date: -

ID	Location	Details	
-	985m NW	Status: Historical Licence No: 28/39/39/0173 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: OVAL ROAD, CAMDEN - GRAND UNION REGENTS CANAL Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 528490 Northing: 184020	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 08/12/1994 Expiry Date: - Issue No: 100 Version Start Date: 08/12/1994 Version End Date: -
-	1133m E	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: MAIDEN LANE BRIDGE, LONDON, NW1 - REGENTS CANAL Data Type: Point Name: Canal and River Trust Easting: 530310 Northing: 183520	Annual Volume (m^3): 7,010,000 Max Daily Volume (m^3): 19,520 Original Application No: - Original Start Date: 18/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 17/12/2007 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	**19**

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 52**

ID	Location	Details	
-	1438m N	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -

ID	Location	Details	
-	1438m N	Status: Active Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LIMITED Easting: 528800 Northing: 184700	Annual Volume (m^3): 17,997 Max Daily Volume (m^3): 604.60 Original Application No: NPS/WR/010565 Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/05/2012 Version End Date: -
-	1579m W	Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 26/09/2002 Expiry Date: 31/03/2007 Issue No: 1 Version Start Date: 26/09/2002 Version End Date: -
-	1579m W	Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 01/04/2007 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 01/04/2007 Version End Date: -
-	1585m W	Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARROW HILL Data Type: Point Name: Thames Water Utilities Ltd Easting: 527636 Northing: 183697	Annual Volume (m^3): 631,000 Max Daily Volume (m^3): 2,000 Original Application No: NPS/WR/009229 Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1785m SW	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: ABBEY HOUSE, BAKER STREET- BOREHOLE Data Type: Point Name: BASKERVILLE ESTATES (GP) LIMITED Easting: 527850 Northing: 182100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 102 Version Start Date: 19/12/2003 Version End Date: -

ID	Location	Details	
-	1823m SW	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT ABBEY HOUSE, BAKER STREET, LONDON NW1 Data Type: Point Name: ABBEY NATIONAL PLC Easting: 527800 Northing: 182100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 02/05/2000 Version End Date: -
-	1862m E	Status: Historical Licence No: 28/39/39/0207 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARNARD PARK, ISLINGTON - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 531020 Northing: 183690	Annual Volume (m^3): 914544 Max Daily Volume (m^3): 3024 Original Application No: - Original Start Date: 02/05/2003 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 08/01/2004 Version End Date: -
-	1862m E	Status: Active Licence No: TH/039/0039/057 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARNARD PARK Data Type: Point Name: Thames Water Utilities Ltd Easting: 531022 Northing: 183681	Annual Volume (m^3): 914,544 Max Daily Volume (m^3): 3,024 Original Application No: NPS/WR/009227 Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1882m W	Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT ABBEY LODGE, PARK ROAD, LONDON NW8 Data Type: Point Name: WOOD MANAGEMENT TRUSTEES LTD Easting: 527420 Northing: 182620	Annual Volume (m^3): 28640 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/11/1991 Version End Date: -

ID	Location	Details	
-	1882m W	Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: ABBEY LODGE, PARK ROAD, LONDON NW8-TWO BOREHOLES Data Type: Point Name: ABBEY LODGE RTM COMPANY LIMITED Easting: 527420 Northing: 182620	Annual Volume (m^3): 28,640 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/06/2006 Version End Date: -
-	1882m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529100 Northing: 181400	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -
-	1882m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE B Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529100 Northing: 181400	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -
-	1890m SW	Status: Historical Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT DORSET HOUSE, GLOUCESTER PLACE, LONDON. W1 Data Type: Point Name: BELLNORTH LIMITED Easting: 527800 Northing: 182000	Annual Volume (m^3): 56370 Max Daily Volume (m^3): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 101 Version Start Date: 10/01/1994 Version End Date: -

ID	Location	Details	
-	1890m SW	Status: Active Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: DORSET HOUSE, LONDON- 2 BOREHOLES Data Type: Point Name: Dorset House Residential Limited Easting: 527800 Northing: 182000	Annual Volume (m^3): 56,370 Max Daily Volume (m^3): 318 Original Application No: NPS/WR/034692 Original Start Date: 13/12/1965 Expiry Date: - Issue No: 104 Version Start Date: 18/11/2020 Version End Date: -
-	1938m S	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'A' Data Type: Point Name: Pontsarn Investments Limited Easting: 529010 Northing: 181350	Annual Volume (m^3): 9,126 Max Daily Volume (m^3): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: 29/11/2012 Version End Date: -
-	1958m S	Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'B' Data Type: Point Name: Pontsarn Investments Limited Easting: 529010 Northing: 181330	Annual Volume (m^3): 9,126 Max Daily Volume (m^3): 25 Original Application No: NPS/WR/011671 Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: 29/11/2012 Version End Date: -
-	1989m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529000 Northing: 181300	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -

ID	Location	Details	
-	1989m S	Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE A Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED Easting: 529000 Northing: 181300	Annual Volume (m^3): 9126 Max Daily Volume (m^3): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology

Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	0

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	0

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 72**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**Coastal Catchment**	**Not part of a river WB catchment**	**128**	**Land area part of London Management Catchment draining to the Tidal Thames**	**London**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	0

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	0

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding

Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 77**

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding

Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

Highest risk on site	**Low**
Highest risk within 50m	**Low**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 79**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	3

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

Features are displayed on the Environmental designations map on **page 80**

ID	Location	Name	Data source
1	744m E	Camley Street Nature Park	Natural England
-	1812m NW	Adelaide	Natural England
-	1872m NE	Barnsbury Wood	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	0

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units

Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

Not recorded

Favourable

Unfavourable - Recovering

Unfavourable - No change

Unfavourable - Declining

Partially destroyed

Destroyed

10.17 SSSI Impact Risk Zones

Records on site	1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 85**

ID	Location	Type of developments requiring consultation
1	**On site**	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t.** **Combustion - General combustion processes >50mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**0**

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations

Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	25

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on **page 87**

ID	Location	Name	Grade	Reference Number	Listed date
2	42m N	Mornington Crescent London Railway Transport Station including Features Underground, Regent's Park, Camden, London, NW1	II	1378713	24/04/1987
3	68m SE	Number 15 To 24 and Area Railings, Regent's Park, Camden, London, NW1	II	1378736	11/01/1999
4	93m N	Statue of Richard Cobden, Regent's Park, Camden, London, NW1	II	1272429	14/05/1974

ID	Location	Name	Grade	Reference Number	Listed date
5	107m W	Numbers 25-35 and Attached Railings, Regent's Park, Camden, London, NW1	II	1113140	14/05/1974
6	108m NE	Numbers 31-53 and Attached Railings, Regent's Park, Camden, London, NW1	II	1067377	14/05/1974
7	109m W	Bollard Outside Number 25, Regent's Park, Camden, London, NW1	II	1113141	11/01/1999
8	114m NE	Camden Palace Theatre, Regent's Park, Camden, London, NW1	II	1272425	28/06/1972
9	121m E	Numbers 58-70 and Attached Railings, Regent's Park, Camden, London, NW1	II	1322081	11/01/1999
A	131m S	Animal Drinking Trough At Southern Junction With Hampstead Road, Regent's Park, Camden, London, NW1	II	1113142	01/07/1998
10	134m SW	Numbers 13-24 and Attached Railings, Regent's Park, Camden, London, NW1	II	1113139	14/05/1974
11	147m W	Tudor Lodge, Regent's Park, Camden, London, NW1	II	1390617	02/09/2003
A	153m S	Number 1 and Attached Railings, Regent's Park, Camden, London, NW1	II	1113137	14/05/1974
A	155m SW	Numbers 2-12 and Attached Railings, Regent's Park, Camden, London, NW1	II	1113138	14/05/1974
12	157m NW	Numbers 3-31 and Railings To Numbers 15 and 21, Regent's Park, Camden, London, NW1	II	1387000	11/01/1999
B	159m NE	Numbers 53-57 and Attached Railings, Regent's Park, Camden, London, NW1	II	1322080	11/01/1999
A	160m S	Numbers 261 and 263 and Attached Railings, Regent's Park, Camden, London, NW1	II	1378712	14/05/1974
B	163m NE	The Old Vicarage and Attached Railings, Gate and Wall, Regent's Park, Camden, London, NW1	II	1322083	11/01/1999
13	184m W	3-7 Mornington Place, Regent's Park, Camden, London, NW1	II	1475224	21/05/2021
C	204m NW	Numbers 22-46 and Attached Railings, Regent's Park, Camden, London, NW1	II	1378629	14/05/1974
14	206m NW	Numbers 38 and 40 and Attached Area Railings, Regent's Park, Camden, London, NW1	II	1244686	11/01/1999
15	209m W	Numbers 9-23 and Attached Railings, Regent's Park, Camden, London, NW1	II	1378627	14/05/1974
C	218m NW	Numbers 68 and 69 and Attached Railings, Regent's Park, Camden, London, NW1	II	1113143	14/05/1974

ID	Location	Name	Grade	Reference Number	Listed date
16	241m NE	Working Men's College and Attached Railings, Wall and Piers, St. Pancras and Somers Town, Camden, London, NW1	II	1067378	14/05/1974
17	243m NW	Numbers 39-51 and Attached Area Railings, Regent's Park, Camden, London, NW1	II	1244687	11/01/1999
18	249m NE	Oakley Square Gardens Lodge, Regent's Park, Camden, London, NW1	II	1322082	14/05/1974

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	**1**

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

Features are displayed on the Visual and cultural designations map on **page 87**

ID	Location	Name	District	Date of designation
1	**On site**	**Camden Town**	**Camden**	**01/11/1986**

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	**0**

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations

Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 92**

ID	Location	Classification	Description
1	**On site**	**Urban**	-

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations

Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks
Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	15

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 94**

ID	Location	Main Habitat	Other habitats
A	123m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	125m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	127m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	133m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
A	139m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	149m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	159m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	167m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	170m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	178m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	190m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	207m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	214m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	220m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	233m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability

Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	1

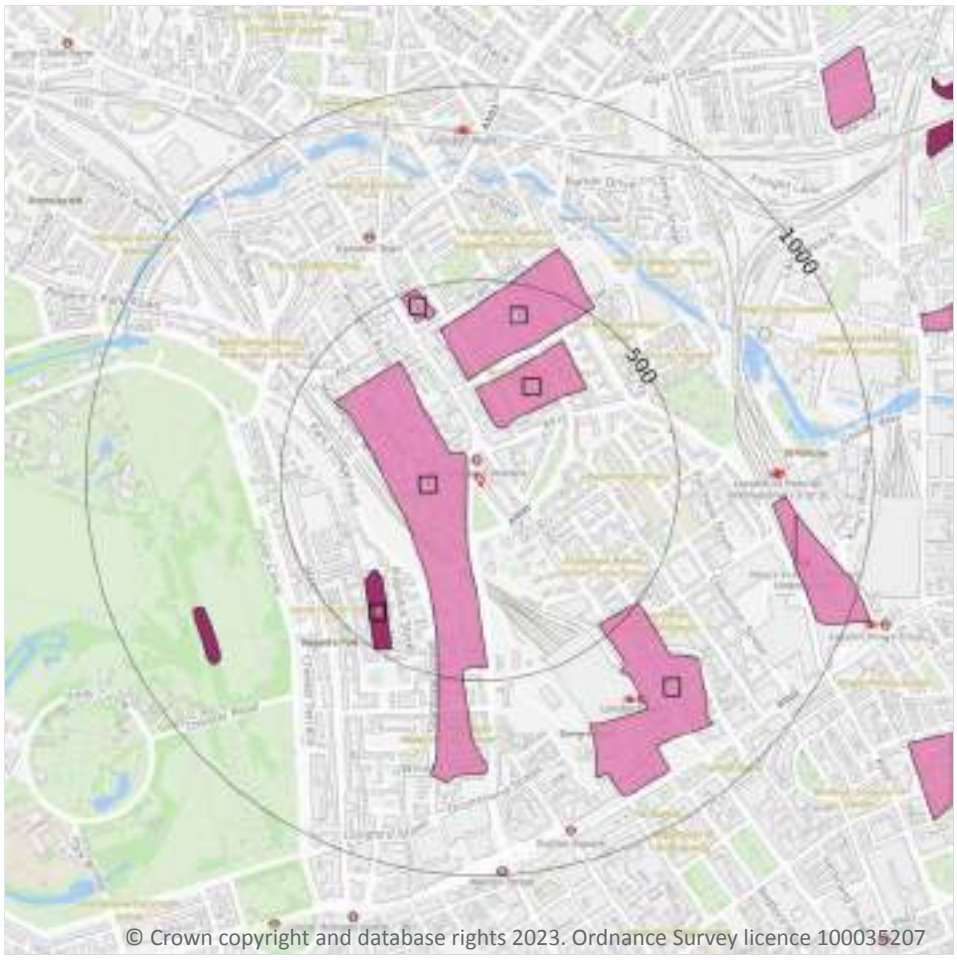
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 97**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TQ28SE**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	6

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.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 98**

ID	Location	LEX Code	Description	Rock description
1	20m W	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
2	127m N	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
3	247m N	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
4	344m SW	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry

ID	Location	LEX Code	Description	Rock description
5	418m N	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
6	465m SE	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 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.

14.4 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.

14.5 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 101**

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.

14.6 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.

15 Geology 1:50,000 scale - Availability

Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

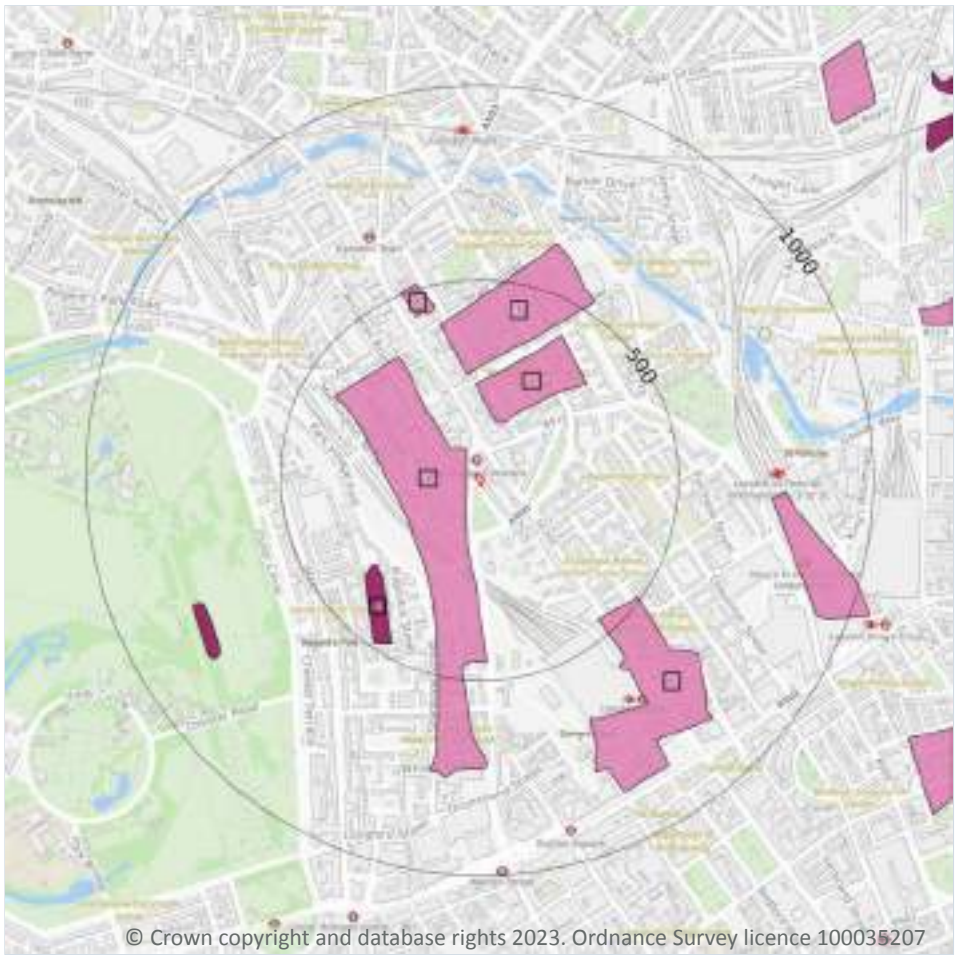
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 103**

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



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	6

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 104**

ID	Location	LEX Code	Description	Rock description
1	21m W	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
2	140m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
3	260m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
4	337m SW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

ID	Location	LEX Code	Description	Rock description
5	431m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
6	454m SE	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.

15.3 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

15.4 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.

15.5 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.

15.6 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.

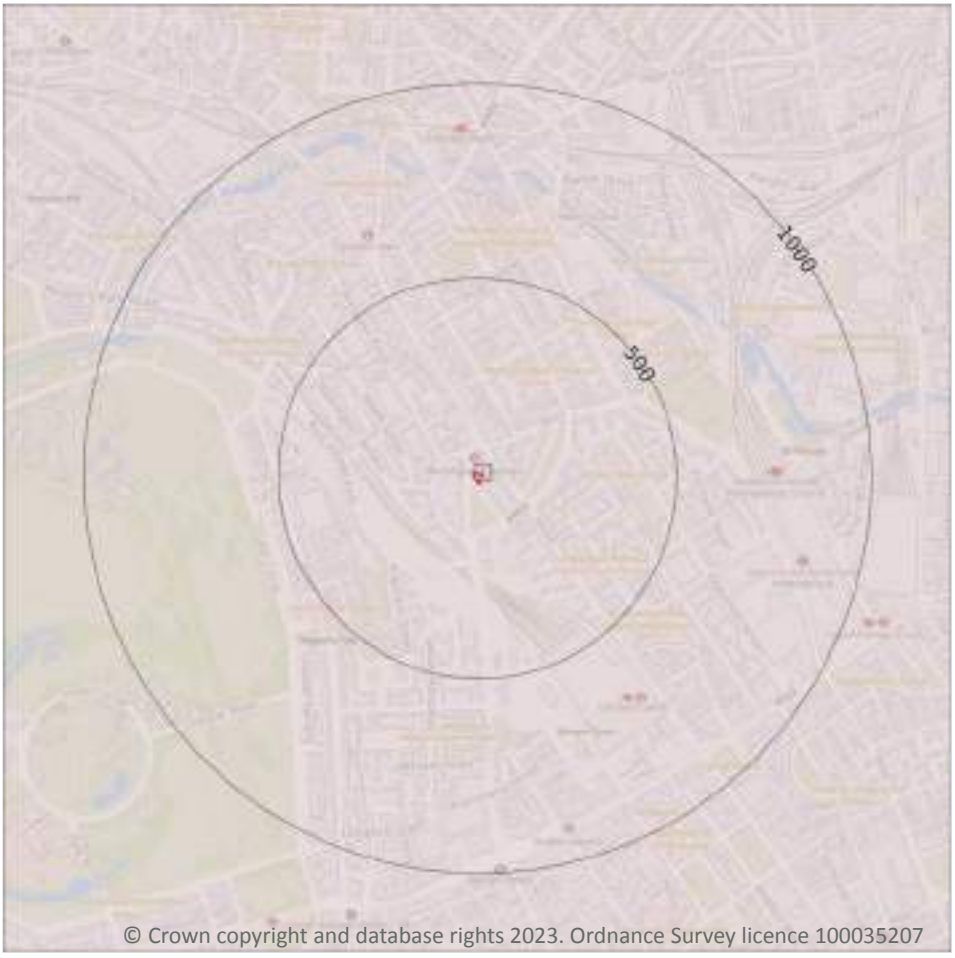
15.7 Landslip permeability (50k)

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



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 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 107**

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.

15.9 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.

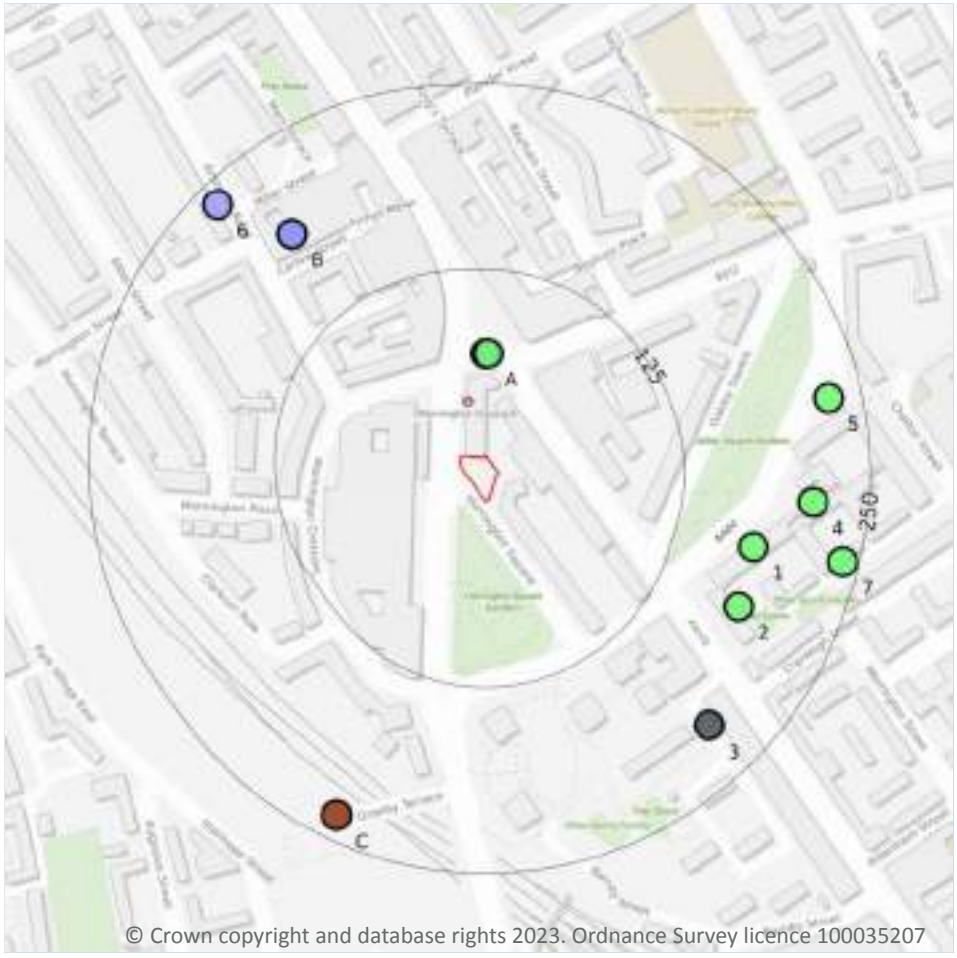
15.10 Bedrock faults and other linear features (50k)

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.

16 Boreholes



Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m	16

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.

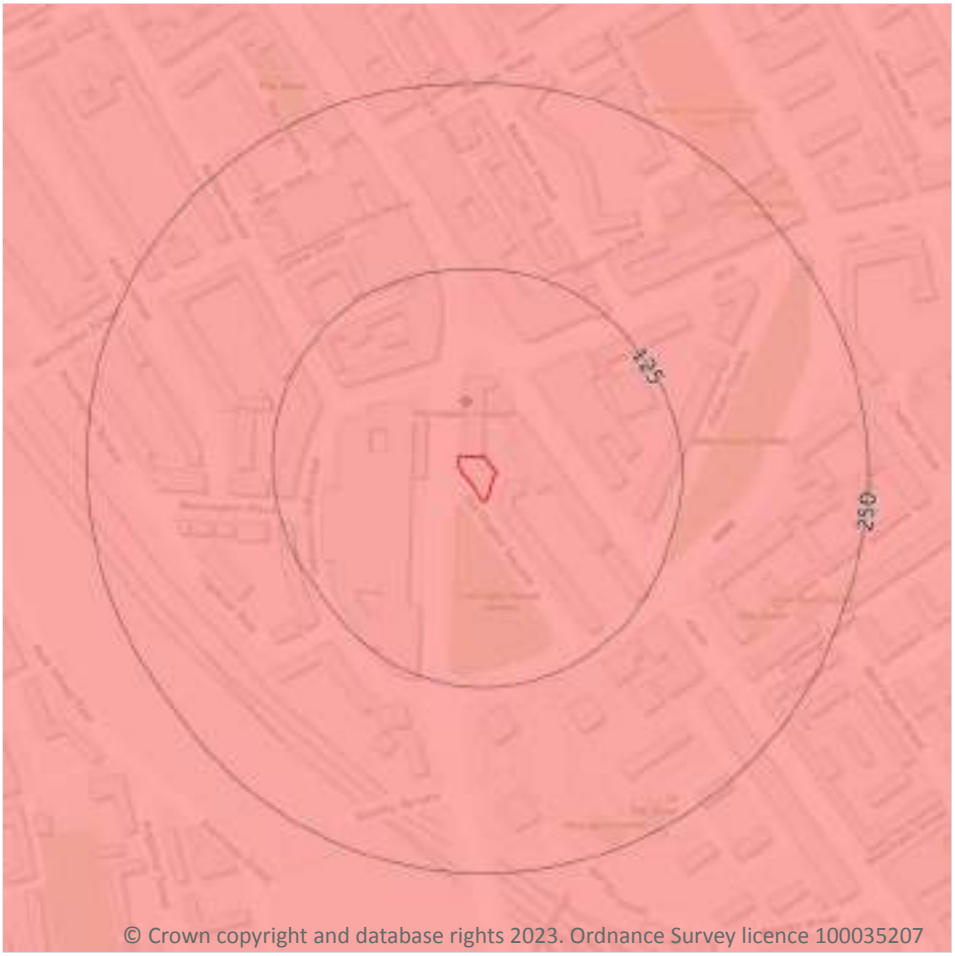
Features are displayed on the Boreholes map on **page 109**

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	69m N	529190 183380	HIGH STREET & EVERSHOLT ST ST PANCRAS	7.01	N	591815
A	69m N	529192 183380	ST PANCRAS	24.38	N	591512
1	179m E	529370 183250	OAKLEM SQUARE CAMDEN 6	24.38	N	592605

ID	Location	Grid reference	Name	Length	Confidential	Web link
2	182m SE	529360 183210	OAKLEM SQUARE CAMDEN 7	12.19	N	592606
B	188m NW	529060 183460	BEDFORD THEATRE SITE TP 2	3.0	N	592750
B	188m NW	529060 183460	BEDFORD THEATRE SITE TP 3	2.0	N	592751
B	188m NW	529060 183460	BEDFORD THEATRE SITE 1	20.0	N	592747
B	188m NW	529060 183460	BEDFORD THEATRE SITE 2	20.0	N	592748
B	188m NW	529060 183460	BEDFORD THEATRE SITE TP 1	2.0	N	592749
3	212m SE	529340 183130	EVERSHOLT HOUSE EVERSHOLT STREET LONDON 3	-	Y	N/A
4	212m E	529410 183280	OAKLEM SQUARE CAMDEN 5	12.19	N	592604
5	227m E	529420 183350	OAKLEM SQUARE CAMDEN 1	15.24	N	592600
C	233m SW	529090 183070	GRANBY TERRACE	12.0	N	591753
C	233m SW	529090 183070	GRANBY TERRACE ST PANCRAS	-1.0	N	591754
6	236m NW	529010 183480	MORNINGTON ROAD ST PANCRAS C34	9.14	N	591830
7	239m E	529430 183240	OAKLEM SQUARE CAMDEN 4	12.19	N	592603

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	1

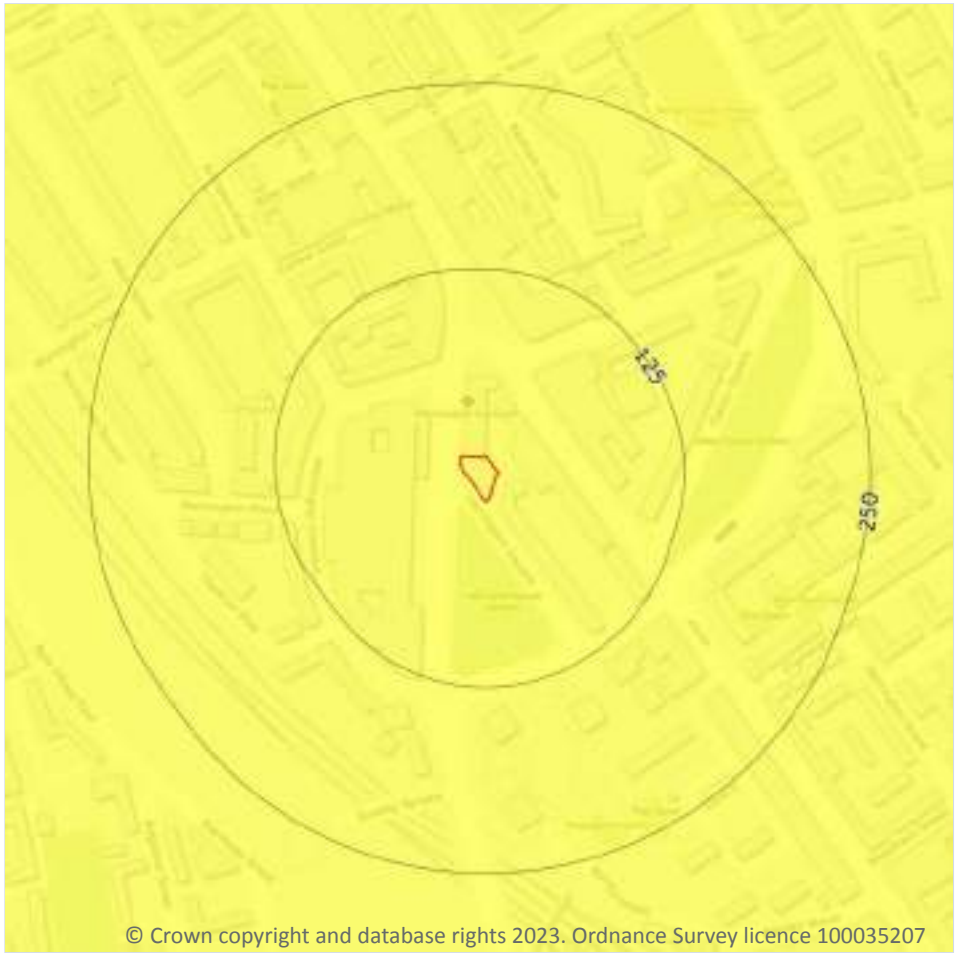
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 111**

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

17.2 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 112**

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

Site Outline

Search buffers in metres (m)

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

17.3 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 113**

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

Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

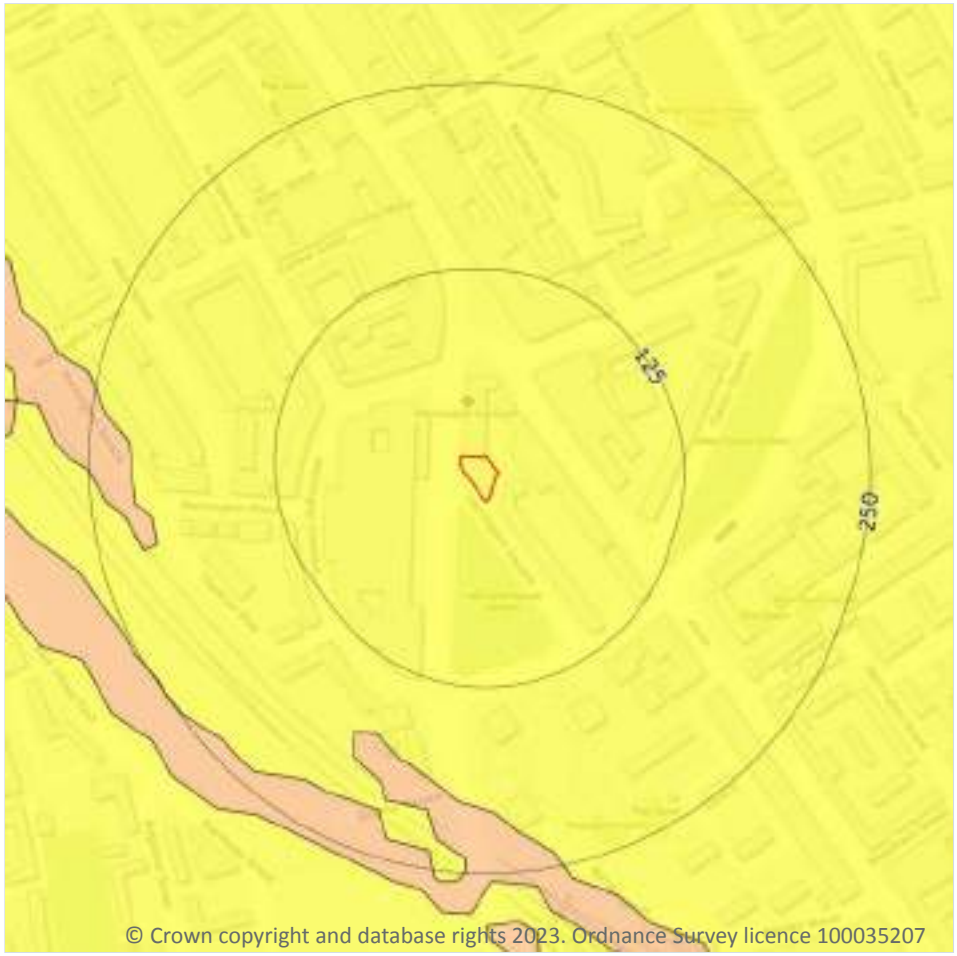
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 114**

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

17.5 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 115**

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

Site Outline

Search buffers in metres (m)

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

17.6 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 116**

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.

18 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

18.1 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 Stantec UK Ltd.

18.2 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.

18.3 Surface ground workings

Records within 250m	0

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.

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	14

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 118**

ID	Location	Land Use	Year of mapping	Mapping scale
B	517m NW	Tunnel	1973	1:10000
B	517m NW	Tunnel	1989	1:10000
B	528m NW	Tunnel	1938	1:10560
B	528m NW	Tunnel	1914	1:10560
B	553m NW	Tunnel	1968	1:10560
B	553m NW	Tunnel	1957	1:10560
B	553m NW	Tunnel	1940	1:10560
B	566m NW	Tunnel	1973	1:10000
B	566m NW	Tunnel	1989	1:10000
4	704m E	Tunnel	1973	1:10000
-	733m E	Tunnel	1894	1:10560
-	976m E	Tunnel	1894	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
-	977m E	Tunnel	1873	1:10560
-	977m E	Tunnel	1873	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.5 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.

18.6 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.

18.7 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 Stantec UK Ltd.

18.8 JPB mining areas

Records on site	**0**

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

This data is sourced from Johnson Poole and Bloomer.

18.9 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.

18.10 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.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 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).

19 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%

19.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 122**

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

This data is sourced from the British Geological Survey and UK Health Security Agency.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	1

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**	**No data**	**No data**	**No data**	**No data**	**No data**

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	4

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	**24**	**4.2**	**524**	**360**	**0.9**	**87**	**121**	**38**	**36**
On site	**25**	**4.4**	**601**	**413**	**0.8**	**85**	**134**	**38**	**39**
1m E	28	4.9	661	454	0.7	88	153	43	45
1m E	27	4.7	608	418	0.8	89	144	43	43

This data is sourced from the British Geological Survey.

20.3 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.

21 Railway infrastructure and projects

Site Outline
Search buffers in metres (m)
Crossrail 1 Stations
Crossrail 1 Route
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

21.1 Underground railways (London)

Records within 250m	**1**

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

Features are displayed on the Railway infrastructure and projects map on **page 126**

Location	Line Name	Line Section	Track Type	Depth (m bgl)	Operational hours
8m W	Northern Line	Northern Line	Tunnel	20.31	Mon-Thu: Early 0512 Late 2358 Fri-Sun: Early 0522

This data is sourced from publicly available information by Groundsure.

21.2 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.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	38

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 126**

Location	Land Use	Year of mapping	Mapping scale
174m SW	Railway Sidings	1973	10000
174m SW	Railway Sidings	1989	10000
175m SW	Railway Sidings	1968	2500
176m SW	Railway Sidings	1916	2500
176m SW	Railway Sidings	1952	2500
176m SW	Railway Sidings	1972	1250
177m SW	Railway Sidings	1964	1250
177m SW	Railway Sidings	1952	1250
177m SW	Railway Sidings	1986	1250
177m SW	Railway Sidings	1991	1250
177m SW	Railway Sidings	1957	10560
177m SW	Railway Sidings	1948	10560

Location	Land Use	Year of mapping	Mapping scale
177m SW	Railway Sidings	1968	10560
178m SW	Railways	1916	-
178m SW	Railways	1871	-
191m SW	Railway	1935	-
191m W	Railway Sidings	1952	1250
191m W	Railway Sidings	1962	1250
192m SW	Railway Sidings	1896	2500
193m SW	Railway Sidings	1971	2500
194m SW	Railway Sidings	1952	2500
196m SW	Railway Sidings	1976	1250
205m SW	Railway Sidings	1894	10560
209m SW	Railway Sidings	1911	10560
209m S	Railway	1930	-
220m S	Railway	1916	-
227m S	Railway	1896	-
227m SW	Railway Sidings	1952	1250
227m S	Railway Sidings	1964	1250
230m W	Railway Sidings	1920	10560
230m W	Railway Sidings	1938	10560
231m W	Railways	1871	-
231m W	Railways	1916	-
238m S	Railway	1876	-
239m W	Railways	1938	-
247m S	Railway	1896	-
247m S	Railway Sidings	1938	10560
247m S	Railway Sidings	1920	10560

This data is sourced from Ordnance Survey/Groundsure.

21.5 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.

21.6 Historical railways

Records within 250m	2

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

Features are displayed on the Railway infrastructure and projects map on **page 126**

Location	Description
240m SW	Abandoned
245m SW	Abandoned

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	45

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

Features are displayed on the Railway infrastructure and projects map on **page 126**

Location	Name	Type
191m SW	Not given	Multi Track
192m SW	Not given	Multi Track
192m SW	Not given	Multi Track
195m SW		rail
197m SW		rail
198m SW		rail
200m SW	Not given	Multi Track

Location	Name	Type
201m SW	Up Fast	rail
201m SW		rail
202m SW		rail
205m SW		rail
206m SW		rail
206m SW	Up Fast	rail
206m SW	Not given	Multi Track
208m W		rail
209m SW	West Coast Main Line	rail
209m SW	Not given	Multi Track
209m SW	Not given	Multi Track
209m SW	Not given	Multi Track
210m SW	Not given	Multi Track
210m SW	Not given	Single Track
211m W		rail
211m SW	Not given	Multi Track
211m SW	Not given	Multi Track
212m SW	Not given	Multi Track
212m SW	West Coast Main Line	rail
213m S	Not given	Multi Track
213m SW		rail
213m SW		rail
217m SW		rail
217m SW		rail
217m SW		rail
218m S	Not given	Multi Track
220m SW		rail
221m S		rail

Location	Name	Type
221m W		rail
221m SW		rail
224m S	Not given	Single Track
224m S	Not given	Multi Track
226m W	Not given	Multi Track
226m S		rail
226m S		rail
233m W		rail
239m S	Not given	Multi Track
246m S	West Coast Main Line	rail

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 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.

21.9 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.

21.10 HS2

Records within 500m	9

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.

Features are displayed on the Railway infrastructure and projects map on **page 126**

Location	Track Type	Speed (mph)	Speed (km/h)	Status
231m SW	Surface Running Track	62mph	100kph	Current preferred consultation route
236m SW	Surface Running Track	62mph	100kph	Current preferred consultation route
257m S	Surface Running Track	31mph	50kph	Current preferred consultation route
262m W	Tunnel	62mph	100kph	Current preferred consultation route
291m W	Tunnel	112mph	180kph	Current preferred consultation route
302m W	Tunnel	112mph	180kph	Current preferred consultation route
401m S	Surface Running Track	31mph	50kph	Current preferred consultation route
427m W	Tunnel	112mph	180kph	Current preferred consultation route
496m NW	Tunnel	112mph	180kph	Current preferred consultation route

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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APPENDIX D
BGS Exploratory Hole Records

Junction of High St. N.W.1.

WELL BORING at Eversholt St. N.W.1. County C 12.

Geol. map 1 in. map New Series 6 in. map 7 N.W. T9/28SE/296

Made by TQ 28 SE Date 1900. 2919 8338

Sunk feet. Bored feet. 256

Communicated by L.C.C.

Height above Ordnance Datum 79. (24.08m) Rest level of water

Yield

Quality (with copy of analysis on separate sheet)

GEOLOGICAL FORMATION	NATURE OF STRATA	THICKNESS Feet	THICKNESS Inches	DEPTH Feet	DEPTH Inches
	Made Ground	4	–	4	– (1.22m)
	River Mud.	2	–	6	– (1.8m)
	Clay.	17	–	23	– ([illegible])

Geological Survey and Museum,
Jermyn Street, London, S.W.1.

(50478X) Wt. W39733/0131 3,500 4/31 H. J. R. & L., Ltd. Gp. 686

(For Survey use only)

6-inch Map Registered No. TQ28SE/28

GEOLOGICAL SURVEY OF GREAT BRITAIN

RECORD OF SHAFT OR BORE FOR MINERALS

Name of Shaft or Bore given by Geological Survey:

Name and Number given by owner:

Nat. Grid Reference 29192.83380

For whom made

Town or Village St Pancras County London.

Exact site (Attach a tracing from a map, or a sketch-map, if possible.)

1" N.S.Map No.	1" O.S.Map No.	Confidential or not
256		

Purpose for which made Trial

Ground Level at shaft/bore relative to O.D. If not ground level give O.D. of beginning of shaft/bore

Made by Date of sinking

Information from Date received

Examined by

SPECIMEN NUMBERS AND ADDITIONAL NOTES

(For Survey use only) Geological Classification	DESCRIPTION OF STRATA	Thickness Ft.	Thickness In.	Depth Ft.	Depth In.
	London Atlas London sheet nV NW.			80	24.38 m

(5412) Wt.12837/P.S.156 5m 10/54 C.W.S.Ltd. Gp.863

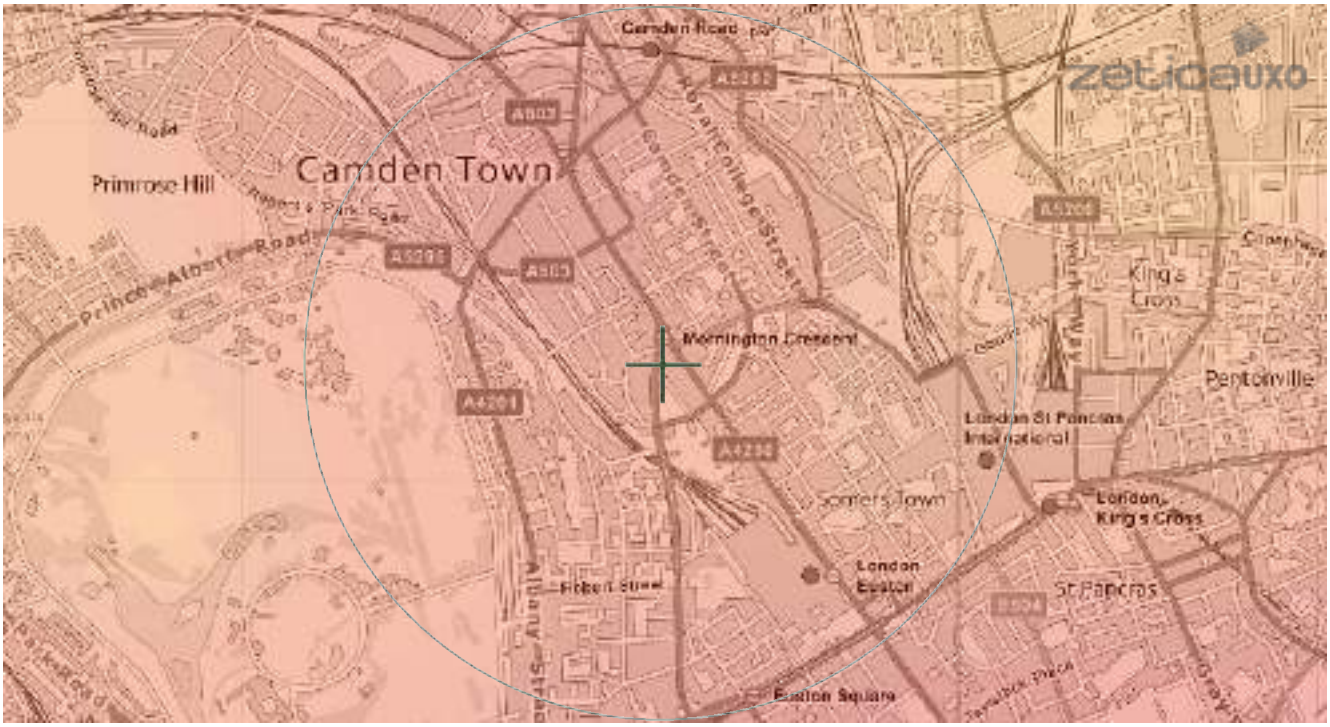
APPENDIX E
UXO Screening Map

UNEXPLODED BOMB RISK MAP

zeticauxo

SITE LOCATION

Location: NW1 2JE,
Map Centre: 529183,183324



LEGEND

London Bomb Risk

miltary	industry	UXO find	Other
transport	dock	Luftwaffe targets	
utilities	abandoned bombs	Bombing decoy	

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

Relative UXB risk across London

The relative risk for the London area is established by plotting the recorded bombing densities.

These are represented as counts of high explosive bombs in km2 area. The areas coloured green represent a record of less than 10 bombs per km2.

Compared to other areas of the UK, this still represents a significant density. However, this is much lower than parts of Central London, where the red colouration indicates in excess of 150 bombs falling per km2, representing a very significant bombing density.

What do I do if my site is in a moderate or high density area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites with a moderate or high bombing density.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**
email: **uxo@zetica.com**
web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: **(https://zeticauxo.com/downloads-and-resources/risk-maps/)**

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

Map showing bomb damage. Classified from Total Destruction (Black), through Seriously Damaged (Dark Red) to Clearance Areas (Green). Includes V1 and V2 Bomb locations.

About: The attack on London between 1939 and 1945 is one of the most significant events in the city's modern history, the impact of which can still be seen in its urban and social landscapes. As a key record of the attack, the London County Council Bomb Damage Maps represent destruction on a huge scale, recording buildings and streets reduced to smoke and rubble.

The full set of maps is made up of 110 hand-coloured 1:2500 Ordnance Survey base sheets originally published in 1916 but updated by the LCC to 1940. Because they use the 1916 map, they give us a glimpse of a 'lost London', before post-war redevelopment schemes began to shape the modern city.

The colouring applied to the maps records a scale of damage to London's built environment during the war - the most detailed and complete survey of destruction caused by the aerial bombardment. The original maps are at the London Metropolitan Archives.

Watch a short film clip entitled The Biggest Blitz here and another showing bomb damage in 1944 here.

Map provided by London Metropolitan Archives. Geo-referenced with the support of the National Library of Scotland