

Grosvenor Garage Fitzgerald Avenue East Sheen London

Preliminary Ground Contamination Risk Assessment Report

Report Beneficiary: Hestia Homes Ltd. Unit 4B Kings Court Burrows Lane Gomshall GU5 9QE

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EXECUTIVE SUMMARY

The following presents a summary of the main findings of the report. It is emphasised that no reliance should be placed on any individual point until the whole of the report has been read as other sections of the report may put into context the information contained herein.

It is proposed to develop the site of the Grosvenor Garage located at Fitzgerlad Avenue, East Sheen, London. The development proposals are understood to comprise the demolition of the existing garage buildings and the construction of three houses with associated gardens in the west of the site and a mixed-use development in the east of the site comprising apartments (including at ground floor level) and a commercial space.

The site currently comprises a vehicle repair workshop, which contains vehicle inspection pits, and a number of domestic garages used, variously, for the storage of cars and household items. Underground fuel tanks are known to be located beneath the site, and above ground waste oil tanks are also present.

The site comprised part of an open field at the time of the earliest inspected historical map, dated 1869, with the site shown in its current footprint by the early 1930s. No further development is shown on the site by the historical maps, though a residential flat has been latterly added above a garage.

Reference to geological datasets indicates that the site is expected to be underlain by Kempton Park Gravel Member and, in turn, London Clay Formation deposits.

The Kempton Park Gravel Member is classed as a Secondary A Aquifer. The London Clay Formation is classed as an Unproductive Stratum. The site does not lie within a SPZ.

The preliminary contamination risk assessment identified potential pollutant linkages relating to proposed end users of the site and controlled waters associated with the historical use of the site as a vehicle repair garage, the suspected presence of underground fuel storage tanks and the presence of above ground waste oil tanks.

It is recommended that this report is submitted to the Local Authority alongside a planning application for the site. Feedback should be obtained from the Local Authority prior to undertaking a ground investigation at the site.



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1. INTRODUCTION

It is proposed to develop the site of the Grosvenor Garage located at Fitzgerlad Avenue, East Sheen, London. The development proposals are understood to comprise the demolition of the existing garage buildings and the construction of three houses with associated gardens in the west of the site and a mixed-use development in the east of the site comprising apartments (including at ground floor level) and a commercial space. A copy of the proposed development layout is presented in Appendix A.

Ashdown Site Investigation Ltd was requested to undertake a preliminary ground contamination risk assessment of the site to accompany a planning application for the site.

The specific objectives of the works were to:

- a) Establish the expected geology, hydrogeology and hydrology at the site;
- b) Ascertain the development history and current site use; and
- c) Develop a preliminary conceptual model of the site identifying potential pollutant linkages relating to end users of the proposed development works, to controlled waters beneath and in the vicinity of the site, or to other off-site sensitive receptors, if identified.

The scope of the works covered by this report, and the terms and conditions under which they were undertaken, were set out within the offer letter Q13283, dated 7th February 2024. The instruction to proceed was received from the client, Hestia Homes Ltd.

Copies of the historical maps and geo-environmental data referred to in this report are presented within Appendix F.



2. SITE CONTEXT

2.1 Walkover Survey

The site is located at Fitzgerlad Avenue, East Sheen, London and is centred on the approximate Ordnance Survey national grid reference 521315 175626. A site location plan is presented as Figure 1.

The site is accessed off Fitzgerald Road, which is to the east of the site, with a footpath (South Worple Avenue) located to the north east of the site, Barnes Hospital to the north west and housing and Grosvenor Ave to the west, with further housing to the south of the site.

The site comprises a number of garage buildings, vehicle workshops and a concrete area of hardstanding.

A large vehicle workshop is located centrally in the site, with associated offices extending to the east of the building. The building was noted to have suspected asbestos cement roof. The workshop had a concrete floor and contained a vehicle inspection pit located centrally. A gully was noted at the base of the inspection pit.





Inspection covers were noted to the east and west of the vehicle workshop, which may indicate the locations of underground fuel storage tanks.

The concrete area to the west of the workshop where the covers were located was raised compared to the concrete area round it, and this area was indicated to be the location of underground fuel storage tanks by the site contact.

The inspection chambers were also present to the east of the vehicle workshop which could also suggest the presence of underground tanks, given their arrangement.



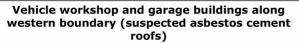
To the north of the vehicle workshop was a flat roof structure; its roof comprising suspected asbestos cement. The workshop was empty with the exception of an air compressor.





A series of garage units were located along the western boundary of the site. Each of these units was noted to have a suspected asbestos cement roof.

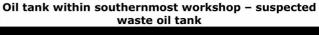
The southernmost building was a larger in part 1.5 storey building, which was in use as a vehicle repair workshop. The 1.5 storey area contained a vehicle lift, and also a large tank for oil. The stickers had been removed, so it was thought to potentially be a waste oil tank. A large cylinder (without labels) was also located within the workshop.

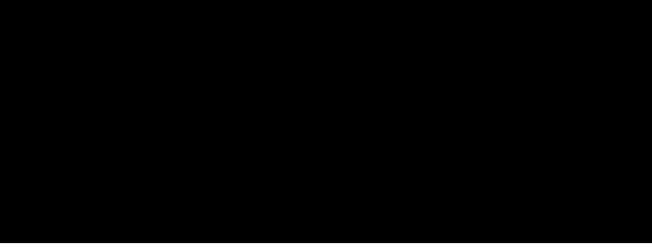






Equipment within southernmost workshop





The adjacent workshop building (with a sliding door) was currently used for storing a car.

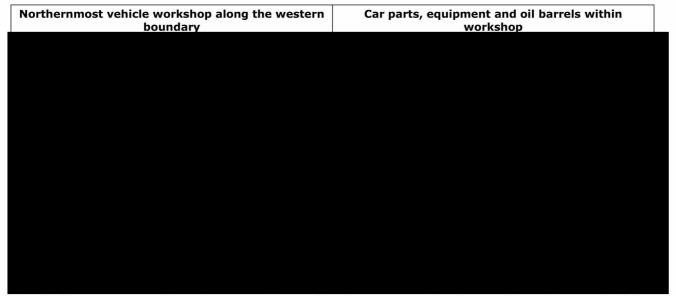
A vehicle inspection pit was located within the workshop building, but was covered by wooden slats which prevented observation of the base of the pit.



Adjacent workshop building with covered inspection pit	Adjacent Workshop building

The neighbouring garages buildings were used for domestic storage.

The garage units at the northern end of the western boundary were in use for the storage of cars, tools and other equipment, including barrels of oil. Access into these units was limited due to the volume of stored materials. It was noted that part of the plastic roofing providing light into the building may have collapsed.



Two further garage units and a concrete courtyard area occupies the south western part of the site. The garages were bounded by a third garage, which is beyond the boundary of the site.

These garages, also with suspected asbestos cement roofs, were used for domestic storage, including the off-site garage.





A further row of domestic garages is present along the southern boundary of the site. As with the other buildings on site, these were noted to have suspected asbestos cement roofs. A flat was present above the eastern garage. The garages were used car parking and domestic storage.

A suspected petrol interceptor was noted adjacent to the garage with residential flat above.





2.2 Geological Data Review

2.2.1 Expected Geology and Aguifer Designation

The stratigraphic succession that may be expected to underlie the site has been established by reference to British Geological Survey (BGS) mapping and the BGS Lexicon of Named Rock Units. The expected stratigraphy is presented in the following table.

Table 1. Expected Strata and Aquifer Designation

Туре	Stratum	Aquifer Designation
Superficial Kempton Park Gravel Member		Secondary A Aquifer
Bedrock London Clay Formation		Unproductive Stratum

The Kempton Park Gravel Member forms part of the river terrace gravel associated with the Thames. It typically comprises sand, derived mainly from the Tertiary beds, together with gravel of sub angular flint, chert and Lower Greensand Formation rock types.

The London Clay Formation forms part of the Thames Group. The formation is of Ypresian age (47.8 to 56 million years old; Early Eocene). The London Clay Formation mainly comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay. It commonly contains thin courses of carbonate concretions ('cementstone nodules') and disseminated pyrite. It also includes a few thin beds of shells and fine sand partings or pockets of sand, which commonly increase towards the base and towards the top of the formation. At the base, and at some other levels, thin beds of black rounded flint gravel occurs in places. Glauconite is present in some of the sands and in some clay beds, and white mica occurs at some levels. The formation is recorded by the BGS to range in thickness up to 150m.

2.2.2 Mining and Ground Workings

Table 2. Mining and Ground Workings from Groundsure Data

Section	Groundsure Comment
BritPits	No BritPits are identified within 500m of the site.
Surface Ground Workings	The only identified record is for a cemetery located 140m west of the site. Given the distance from the site, the cemetery is not considered to pose an unacceptable risk to the site.
Underground Workings	No underground workings are identified within 1km of the site.
Underground Mining Extents	No records are identified within 500m of the site.
Historical Mineral Planning Areas	No records are identified within 500m of the site.
Non-Coal Mining	No records are identified within 1000m of the site.
JPB Mining Areas	No records are identified within 500m of the site.
The Coal Authority – Non-Coal Mining	No records are identified within 500m of the site.
Researched Mining	No records are identified within 500m of the site.
Mining Record Office Plans	No records are identified within 500m of the site.



Section	Groundsure Comment
BGS Mine Plans	No records are identified within 500m of the site.
Coal Mining	No records are identified on the site.
Brine Areas	No records are identified on the site.
Gypsum Areas	No records are identified on the site.
Tin Mining	No records are identified on the site.
Clay Mining	No records are identified on the site.

2.2.3 Radon

Table 3. Radon

Section	Groundsure Comment
Radon Affected Areas	The site is reported to be within an area where less than 1% of properties are at or above the action level requiring radon gas protection measures to be installed in new buildings.
Radon Protection Measures	No radon protection measures are reported by the British Geological Survey to be necessary in the construction of new dwellings or extensions.

2.2.4 Soil Chemistry

Table 4. BGS Estimated Urban Soil Chemistry

Contaminant	Estimated Value (mg/kg)
Arsenic	22
Bioaccessible Arsenic	3.8
Lead	411
Bioaccessible Lead	282
Cadmium	1.6
Chromium	74
Copper	107
Nickel	29
Tin	47

2.3 Hydrogeological and Hydrological Data

2.3.1 Groundwater Abstractions

The closest groundwater abstraction licence is recorded to lie 614m to the south east of the site. The abstraction is for spray irrigation.



2.3.2 Surface Water Abstractions

No surface water abstraction licences are indicated within 2km of the site.

2.3.3 Potable Abstractions

No potable abstraction licences are indicated within 2km of the site.

2.3.4 Groundwater Vulnerability

The level of groundwater vulnerability, as reported within the Groundsure data, is Medium.

2.3.5 Groundwater Source Protection Zones (SPZ)

The Environment Agency defines SPZs as those areas where groundwater supplies are at risk from potentially polluting activities and accidental releases of pollutants. SPZs are primarily a policy tool used to control activities close to water supplies intended for human consumption.

The site does not lie within a SPZ.

2.3.6 Surface Water Features

The nearest recorded significant surface water feature is an underground watercourse, located 89m north east of the site.

2.3.7 Flood Risk

The table below summarises the flood risk data provided by the Groundsure report. It is noted that this does not constitute a flood risk assessment.

Table 5. Flood Risk

Section	On Site	Within 50m of the Site
Risk of Flooding from Rivers and Seas (RoFRaS)	None Identified	None Identified
Historical Flood Events	None Identified	None Identified
Flood Defences	None Identified	None Identified
Areas Benefitting from Flood Defences	None Identified	None Identified
Flood Storage Areas	None Identified	None Identified
Environment Agency Flood Zone 2	None Identified	None Identified
Environment Agency Flood Zone 3	None Identified	None Identified
Surface Water Flooding	Highest Risk: 1 in 30 year, 0.1m-0.3m	Highest Risk: 1 in 30 year, 0.3m-1.0m
Groundwater Flooding	Highest Risk: High	Highest Risk: High



GEO-ENVIRONMENTAL DATA

3.1 Historical Industrial Sites

The following table summarises past land uses of the site and the surrounding area extracted by Groundsure from historical maps.

Table 6. Historical Industrial Sites

Section	Remarks
Historical Industrial Land Uses	A hospital complex is identified 2m north west of the site. Given the nature of entry, it is not considered to pose an unacceptable risk to the site. A nursey is identified 44m north west of the site. The nursery is shown on the mapping in the late 19 th century, but is not shown on the first 20 th century maps when the area is shown as developed for housing. Given the distance from the site and the time elapsed since the area was a nursery it is not considered to pose an unacceptable risk to the site. A corporation yard is identified 107m south east of the site. Given the distance from the site it is not considered to pose an unacceptable risk to the site. The cemetery discussed in Table 2 is also identified. No other historical industrial land uses are identified within 250m of the site.
Historical Tank Database	No historical tanks are identified within 100m of the site.
Historical Energy Features	An electricity substation is identified 58m west of the site. Given the distance to the site it is not considered to pose an unacceptable risk to the site.
Historical Petrol Stations	No historical petrol stations are identified within 100m of the site.
Historical Garages	The site is identified to be a garage.
Historical Military Sites	No historical military sites are identified within 100m of the site.

3.2 Landfill and Other Waste Sites

The following table summarises the location of waste sites either on the site or within the surrounding area (within 250m of the site).

Table 7. Landfill and Other Waste Sites

Section	Groundsure Comments
Active or Recent Landfills	No active or recent landfills are identified within 250m of the site.
Historical Landfill (BGS Records/LA/Mapping Records EA Records)	No historical landfills are identified within 250m of the site.
Historical Waste Sites	No historical waste sites are identified within 250m of the site.
Licensed Waste Sites	No licensed waste sites are identified within 250m of the site.
Waste Exemptions	No waste exemptions are identified within 250m of the site.



3.3 Current Industrial Land Use

The relevant current industrial land uses are discussed in the table below.

Table 8. Current Industrial Land Uses

Section	Groundsure Comments
Recent Industrial Land Use	The site is identified as a repair and servicing garage. The electricity substation as discussed in Table 6 is also identified. No other features are identified within 100m of the site.
Current or Recent Petrol stations	No current or recent petrol stations are identified within 100m of the site.
Electricity Cables / Gas Pipelines	No underground high voltage cables or high-pressure pipes are identified within 100m of the site.
Sites determined as Contaminated Land	No sites determined as contaminated land are identified within 100m of the site.
Control of Major Accident Hazards (COMAH) Sites	No COMAH sites are identified within 100m of the site.
Regulated Explosive Sites	No regulated explosive sites are identified within 100m of the site.
Hazardous Substance Storage/Usage	No consents have been granted for hazardous substance storage/usage within 100m of the site.
Historical Licensed Industrial Activities (IPC)	No records are identified within 100m of the site.
Licensed Industrial Activities (Part A(1))	No records are identified within 100m of the site.
Licensed Pollutant Release (Part A(2)/B)	No records are identified within 100m of the site.
Radioactive Substance Authorisations	No records are identified within 100m of the site.
Licensed Discharges to Controlled Waters	No records are identified within 100m of the site.
Pollutant Release to Surface Water / Public Sewer	No records are identified within 100m of the site.
List 1 / List 2 Dangerous Substances	No records are identified within 100m of the site.
Pollution Incidents (EA/NRW)	No pollution incidents are identified within 100m of the site.
Pollution Inventory Substances / Waste Transfers / Radioactive Waste	No records are identified within 100m of the site.

3.4 Sensitive Land Use

A local nature reserve (LNR) is identified 445m east of the site. The LNR is considered too distant to be a receptor from contamination at the site.

3.5 Railway Infrastructure and Projects

A railway line is identified ~109m north of the site.



4. HISTORICAL MAP AND IMAGERY REVIEW

Historical Ordnance Survey maps and imagery covering the area of the site have been reviewed and are summarised in the following table.

It is noted that maps and images present information applicable at the time of production of the maps or image captures, that maps are subject to surveying and cartographic errors and images to atmospheric conditions at the time of their capture. It is possible that significant developments may have taken place on or within the vicinity of the site that are not shown on the inspected maps and images. In this connection it is noted that one of the maps does not show the site area, likely due to a geo-referencing error.

'In the Vicinity of the Site' generally refers to features of relevance within approximately 250m of the site boundary but may also include more distant features if considered to be pertinent to the assessment of the development history.

Table 9. Summary of Significant Features Identified on Historical Maps and Images

Map/Image Details	On-Site	In the Vicinity of the Site
1869 1:2,500	The site comprises part of an open field, which extends around the site.	A railway line is shown 110m north of the site and a cemetery 140m north west of the site.
		The area to the south of the site has been developed for residential housing.
1896 1:2,500	The site is mostly an undeveloped area of land, potentially forming the garden of a house located to the south of the site.	A fever hospital is shown 80m to the west of the site, with a mortuary associated with the hospital 125m north west of the site.
		A nursery is shown approximately 50m to the east of the site.
		Significant development is shown in the vicinity of the site, with housing now presented to south west, west and north of the site.
1913 1:2,500		The hospital has been redeveloped, with a hospital building now shown approximately 40m to the north west of the site, the mortuary is now shown 95m to the north west of the site.
		The nursery to the east of the site has been developed for residential housing.
1933 1:2,500	The site is shown developed on its approximate current footprints, with buildings along the western boundary, in the southern tip of the site, along the southern boundary and the north eastern boundary.	A building is shown adjacent to the east of the building in the southernmost tip of the site.
1951 1:1,250	The site is labelled as a garage, with the buildings on site shown to be formed of a number of smaller units.	The closest hospital building to the north west of the site is no longer shown.

R16115

Map/Image Details	On-Site	In the Vicinity of the Site
1991 1:1,250		The hospital to the north west has been redeveloped, with the closest hospital building now shown approximately 25m to the north west of the site.
		An electricity substation, with the boundary of the hospital is shown 60m to the west of the site.

The aerial imagery indicates that the site and its surrounds have remained as shown on the 1991 map.

5. ADDITIONAL INFORMATION

5.1 Local Authority Search

A search was made with the Local Authority for their relevant information pertaining to contaminated land. A copy of the Local Authority response is included as Appendix B and is discussed in the section below.

5.1.1 Historical Maps

The Local Authority's review of the historical maps, confirms the site was undeveloped until the post World War II mapping, when the site is shown as a garage.

5.1.2 Part 2A

The Local Authority confirm that the site has not been determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990, the Local Authority have no imminent plans to investigate the site in this regard.

5.1.3 Nearby Site Investigations

The nearest Phase II site investigation provided by the Local Authority is for a site 26-27 Priests Bridge, London, located 125m south east of the site. A summary of a Phase I report is included within the report, which identified a moderate to high risk of contamination due to the site's use as a repair garage, including the presence of inspection pits and filled fuel tanks, and a potential gas risk from made ground on the site, Alluvium deposits beneath the site and the on site fuel tanks.

A limited ground investigation was undertaken comprising the drilling of 4 no. boreholes, with ground gas standpipes were installed in three of the standpipes and monitored on one occasion. The report says that further monitoring was to be undertaken and a letter report provided for this.

Made ground was encountered to depths of between 0.15m and 2.50m in the boreholes comprising sandy gravel of brick, concrete and flint. Underlying the made ground the boreholes encountered sands and gravels to the full depth of the investigation.



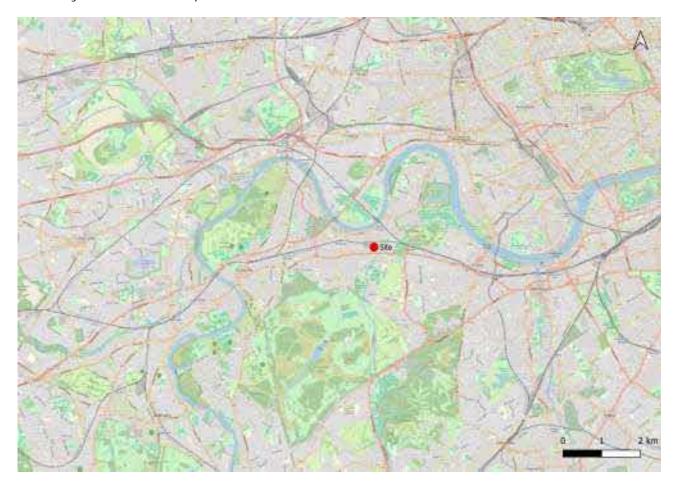
Samples of soils were tested for the concentrations of contaminants identified by the Phase 1 assessment, with the results compared to generic assessment criteria (GAC) for the generic residential without homegrown produce land use. Elevated concentrations of lead, PAH compounds, monoaromatics, petroleum hydrocarbons and VOCs were recorded by laboratory testing.

The single round of ground gas monitoring assessed that the gas concentrations were below the calculated gas screening values (GSVs) and that gas protection measures were not considered necessary. However, the report noted the requirement for additional ground gas monitoring to support the conclusion made.

Remedial measures were considered to be required as part of the development.

5.1.4 Private Water Supplies

A diagram showing the location of the private water supplies from the data provided by the Local Authority is shown on the plan below:



As is shown on the plan, the nearest private water supplies (the green dots) are in excess of 2km from the site.



5.1.5 Part B Processes

The Local Authority confirm that no neighbouring properties have permitted Part B processes.

5.2 Client Information

The client has provided details of a 1967 planning application for the installation of 2 no. 2,000 gallon underground fuel storage tanks. A copy of the information supplied is included as Appendix C. The client has stated that the tanks were decommissioned by the Fire Brigade circa 2008; the decommissioning comprising filling the tanks with foam.

6. PRELIMINARY CONTAMINATION RISK ASSESSMENT

6.1 Introduction

The risk assessment considers the potential sources of contamination identified, the receptors that may be present in view of the development proposals and the contaminant pathways by which these may be linked. A complete pollutant linkage is only deemed to exist where all three are present and a site is considered suitable for use where no complete pollutant linkages are identified.

Where a complete pollutant linkage is deemed to be present, an assessment of the level of risk associated with the pollutant linkage has been carried out in line with current guidance¹.

The level of risk is determined using the risk matrix presented in the following table. Classifications of probability, consequence and risk are presented in Appendix D.

Table 10. Risk Assessment Matrix

		Probability								
		Very Low	Low	Moderate	High					
Consequence	Very Minor	Negligible	Very Low	Low	Low/Moderate					
	Minor	Very Low	Low	Low/Moderate	Moderate					
	Moderate	Low	Low/Moderate	Moderate	High					
	Severe	Low/Moderate	Moderate	High	Very High					

6.2 Contaminant Pathways I dentified

The development is to comprise a mixed-use development including residential buildings together with areas of private garden and areas of soft landscaping.

Pathways associated with gas and vapour intrusion into new buildings are considered to be valid, along with direct contact and dust related pathways, and pathways associated with the consumption of home grown produce.

Should the proposed development plans be altered, a revised risk assessment may be required.

¹ Contaminated Land Risk Assessment: A guide to good practice, CIRIA C552, 2001.



It is noted that an asbestos survey of existing structures and infrastructure² was beyond the brief of this report. The risk assessment assumes that, should asbestos be identified within buildings or infrastructure, with particular reference to the potential asbestos cement roof panels, any such materials will be managed in accordance with current legislation and guidance, to ensure this does not represent an ongoing risk to end users and, specifically, to ensure that asbestos materials are not introduced into the underlying soils.

The site is expected to be underlain by the Kempton Park Gravel Formation which is classed as a Secondary A Aquifer. Although the site is not located within a SPZ, and is located within an urban area, pathways relating to controlled waters may be reasonably considered to be present.

6.3 Potential Contamination Sources Identified

The following potential sources of contamination have been identified by the preliminary contamination risk assessment:

Historical use of the site as a garage including vehicle inspection pits. Underground fuel storage tanks on site.

The potential contaminants associated with these sources are set out in the conceptual model.

6.4 Preliminary Conceptual Model

The preliminary conceptual model for the proposed development is presented in Appendix E.

6.5 Recommendations

Potential pollutant linkages are considered to be present. It is therefore recommended that an intrusive ground investigation should be undertaken to allow a quantitative assessment to be made of the risks posed to end users and controlled waters.

6.6 Regulatory Approval

It is recommended that this report is submitted to the Local Authority as part of a planning application for the site. Feedback should be obtained from the Local Authority prior to undertaking a ground investigation at the site.

Ashdown Site Investigation Ltd.

² As defined under Section 5(a) of the Control of Asbestos Regulations, 2012.



FIGURES

Figure 1 Site Location Plan





APPENDIX A

Proposed Development Layout



1:200 A1

HA24-267



APPENDIX B

Local Authority Search

From: Gavin Day

Sent: Monday, February 19, 2024 7:17:47 PM

To: Stuart Card

Subject: Grosvenor Garage Fitzgerald Avenue East Sheen SW14 8SZ - FS-Case-587210555

Hi Stuart, Thank you for getting back. You're not detailing any questions, which is the most common approach. In my view relevant questions would be for our:

i) to interrogate our historic OS maps and report on those,

The "post WW2" map shows garages appear on site.

The year 1930 map shows the plot as a bare(unfilled) outline.

The year 1896 map shows Fitzgerald Avenue propagated and the site has its current outline.

The year 1869-1874 map shows the site south of fenced path.

ii) to reveal the status of the site with regards to P2A, and state the degree of imminence with regards when we plan to investigate,

We have not declared the site contaminated-land according to P2A of the EPA 1990, and have no imminent plans to investigate.

iii) to give you our nearest site-investigation,

Please find our nearest investigation attached.

iv) to search our records for the proximity of the site to private water supplies,

Please find LBRuT's list of PWS attached.

v) to describe the nearest Part B process.

The site has no neighbours that are Part B processes. Please see attached list.

Does that sound OK?

Gavin Day
Contaminated Land Officer
Regulatory Services Partnership
Serving Merton, Richmond and Wandsworth Councils







APPENDIX C

Client Supplied Information – Underground Tanks

Reference No. 67/1839.

(which please quote in all correspondence)

London Borough of Richmond upon Thames

25 :

TOWN AND COUNTRY PLANNING ACTS 1962-1963

To Mr. D. Downing, C/o Regent Oil Co.Ltd., 117, Park Street, London W.1.

Say Alt . Sail

where As in accordance with the provisions of the Town and Country Planning Acts, 1962 and 1963 and the Orders made thereunder you have made application dated 27th September, 1967. and illustrated by plans for the permission of the Local Planning Authority to develop land situated at Grosvenor Garage, 13, Fitzgerald Avenue, East Sheen. by Installation of two 2,000 gallon underground tanks.

NOW THEREFORE WE THE MAYOR ALDERMEN AND BURGESSES OF THE LONDON BOROUGH OF RICHMOND UPON THAMES acting by the Council of the said Borough, the Local Planning Authority, HEREBY GIVE YOU NOTICE pursuant to the said Acts and the Orders made thereunder that permission to develop the said land in accordance with the said application is hereby GRANTED,

(a) Strike out if unconditional consent issued.

(b) Strike out if unconditional TX TYPE TO THE THE TOTAL T

Dated this

day of 2 0 NOV 1967

196

Signature

Town Clerk

Municipal Offices, Twickenham,

Notes: (i) Attention is particularly drawn to the Schedule to this Notice which sets out the rights of applicants who are aggreed by the decisions of the Local Planning Authority.

(ii) This decision does not purport to convey any approval or consent which may be required under any bye-laws or under any enactment other than the Town and Country Planning Acts, 1962 and 1963.

THE SCHEDULE REFERRED TO ABOVE

Rights of Applicants Aggrieved by Decision of Local Planning Authority

- (1) If the Applicant is aggrieved by the decision of the Local Planning Authority to refuse permission or approval for the proposed development, or to grant permission or approval subject to conditions, he may by notice served within one month of receipt of this notice, appeal to the Minister of Housing and Local Government in accordance with Section 23 of the Town and Country Planning Act, 1962. The Minister has power to allow a longer period for the giving of a Notice of Appeal and he will exercise his power in cases where he is satisfied that the applicant has deferred the giving of notice because negotiations with the local planning authority in regard to the proposed development are in progress. The Minister is not, however, required to entertain such an appeal if it appears to him that permission for the proposed development could not have been granted by the Local Planning Authority, or could not have been so granted otherwise than subject to the conditions imposed by them, having regard to the provisions of Sections 17 to 21 of the Act and of any Development Order and to any directions given under such Order.
- (2) If permission to develop land is refused, or granted subject to conditions, whether by the Local Planning Authority or by the Minister of Housing and Local Government, and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, he may in accordance with Section 129 of the Town and Country Planning Act, 1962, serve on the Council of the County District in which the land is situated a purchase notice requiring that Council to purchase his interest in the land.
 - (3) In certain circumstances, a claim may be made against the Local Planning Authority for compensation, where permission is refused, or granted subject to conditions by the Minister on appeal or on a reference of the application to him. The circumstances in which such compensation is payable are set out in Sections 88 to 117 and 123 of the Town and Country Planning Act, 1962.

FOR OFFICE USE ONLY

Particulars of any Direction under the Acts or the Orders made thereunder.

Date of Appeal to the Minister of Housing and Local Government and Date and Effect of his decision.



APPENDIX D

Classification of Probability, Consequence and Risk

Probability of risk being realised						
Classification	Definition					
High	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution.					
Moderate	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.					
Low	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place and is less likely in the shorter term.					
Very Low	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.					

Consequence of risk being realised								
Classification	Category	Definition						
	Human Health	Short term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection A 1990, Part IIA.						
Severe	Controlled Waters	Short term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource.						
	Property	Catastrophic damage to buildings/property.						
	Ecological Systems	A short term risk to a particular ecosystem or organisation forming part of such ecosystem.						
Moderate	Human Health	Chronic damage to Human Health.						
	Controlled Waters	Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution).						
	Ecological System	A significant change in a particular ecosystem or organism forming part of such ecosystem.						
	Controlled Waters	Pollution of non-sensitive water resources.						
Minor	Property	Significant damage to crops, buildings, structures and services						
Willion	Ecological Systems	Damage to sensitive buildings/structures/services or the environment.						
	Human Health	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing, etc.)						
Very Minor	Property	Easily repairable effects of damage to buildings, structures and services.						
	Project	Harm, although not necessarily significant harm, which may result in a financial loss or expenditure to resolve.						

	Risk classification definitions							
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 to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) 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 (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the long term.							
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential 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 there is a low likelihood of this hazard occurring and if realised, harm 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.							



APPENDIX E

Preliminary Conceptual Model

• Underground storage tanks on site							including vehicle inspection pits	Historical use of the site as a garage						Potential Source	Grosvenor Garage, Fitzge		
Groundwater	End Users (via Water Supply Pipework)				Fnd Users			Groundwater	End Users (via Water Supply Pipework)				Fnd Hears			Potential Receptor	Grosvenor Garage, Fitzgerald Avenue, East Sheen, London
Petroleum Hydrocarbons and VOC Compounds	Petroleum Hydrocarbons and VOC Compounds		Petroleum Hydrocarbons and VOC Compounds					Heavy Metals, PAH Compounds, Petroleum Hydrocarbons and VOC Compounds	Petroleum Hydrocarbons and VOC Compounds			VOC Compounds	Heavy Metals, PAH Compounds, Petroleum Hydrocarbons and			Potential Contaminants	n
Migration to groundwater	Contamination of incoming services	Inhalation of soil gases/ Risk of explosion	Inhalation of soil vapours	Inhalation of soil dust (indoor and outdoor)	Consumption of home-grown produce and attached soil	Ingestion of soil and indoor dust	Dermal contact with soil and dust (indoor & outdoor)	Migration to groundwater	Contamination of incoming services	Inhalation of soil gases/ Risk of explosion	Inhalation of soil vapours	Inhalation of soil dust (indoor and outdoor)	Consumption of home-grown produce and attached soil	Ingestion of soil and indoor dust	Dermal contact with soil and dust (indoor & outdoor)	Potential Pathway	
Yes	Yes	Identified contaminants do not pose a risk via this pathway	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Identified contaminants do not pose a risk via this pathway	Yes	Yes	Yes	Yes	Yes	Complete Linkage Present?	Preliminary Conceptual Model
P3: Moderate	P3: Moderate		P3: Moderate	P3: Moderate	P3: Moderate	P3: Moderate	P3: Moderate	P3: Moderate	P3: Moderate		P3: Moderate	P3: Moderate	P3: Moderate	P3: Moderate	P3: Moderate	Probability	al Model
C2: Minor	C3: Moderate		C3: Moderate	C3: Moderate	C3: Moderate	C3: Moderate	C3: Moderate	C2: Minor	C3: Moderate		C3: Moderate	C3: Moderate	C3: Moderate	C3: Moderate	C3: Moderate	Consequence	P16494
Low/Moderate	Moderate	N/A	Moderate	Moderate	Moderate	Moderate	Moderate	Low/Moderate	Moderate	N/A	Moderate	Moderate	Moderate	Moderate	Moderate	Risk	:94



APPENDIX F

Groundsure Enviro+Geo Insight Report Historical Maps



Enviro+Geo

1, FITZGERALD AVENUE, EAST SHEEN, LONDON, RICHMOND UPON THAMES, SW14 8SZ

Order Details

Date: 24/02/2024

Your ref: P16494

Our Ref: GS-YTL-2SD-1Y5-4JZ

Site Details

Location: 521315 175626

0.09 ha Area:

Authority: London Borough of Richmond upon

Thames 7



Sum m ary of findings

Aerial image <u>p. 2</u> >

<u>p. 9</u> >

OS MasterMap site plan

groundsure.com/insightuserquide / p.14 >





Summary of findings

-							
Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
<u>15</u> >	<u>1.1</u> >	Historical industrial land uses >	0	4	13	15	-
<u>17</u> >	<u>1.2</u> >	<u>Historical tanks</u> >	0	0	1	2	-
<u>17</u> >	<u>1.3</u> >	<u>Historical energy features</u> >	0	0	3	23	-
19	1.4	Historical petrol stations	0	0	0	0	-
<u>19</u> >	<u>1.5</u> >	<u>Historical garages</u> >	4	0	7	5	-
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
<u>21</u> >	<u>2.1</u> >	<u>Historical industrial land uses</u> >	0	12	25	18	-
<u>24</u> >	<u>2.2</u> >	<u>Historical tanks</u> >	0	0	1	2	-
<u>24</u> >	<u>2.3</u> >	<u>Historical energy features</u> >	0	0	6	49	-
26	2.4	Historical petrol stations	0	0	0	0	-
20							
26 >	<u>2.5</u> >	Historical garages >	7	0	13	6	-
		Historical garages > Waste and landfill >	7 On site	O 0-50m	13 50-250m	6 250-500m	500-2000m
<u>26</u> >	<u>2.5</u> >						500-2000m
26 > Page	2.5 > Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	- 500-2000m - -
26 > Page	2.5 > Section 3.1	Waste and landfill > Active or recent landfill	On site	0-50m O	50-250m O	250-500m	- 500-2000m - -
26 > Page 28 28	2.5 > Section 3.1 3.2	Waste and landfill > Active or recent landfill Historical landfill (BGS records)	On site O	0-50m O	50-250m O	250-500m O	- 500-2000m - - -
26 > Page 28 28 29	2.5 > Section 3.1 3.2 3.3	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records)	On site O O	0-50m O O	50-250m 0 0	250-500m 0 0	- 500-2000m - - -
26 > Page 28 28 29 29	2.5 > Section 3.1 3.2 3.3 3.4	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records)	On site 0 0 0 0	0-50m 0 0	50-250m 0 0 0	250-500m 0 0 0	- 500-2000m - - - -
26 > Page 28 28 29 29	2.5 > Section 3.1 3.2 3.3 3.4 3.5	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites	On site 0 0 0 0 0	0-50m 0 0 0	0 0 0 0 0	250-500m 0 0 0 0	- 500-2000m - - - - -
26 > Page 28 28 29 29 29	2.5 > Section 3.1 3.2 3.3 3.4 3.5 3.6	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites	On site 0 0 0 0 0 0	0-50m 0 0 0 0	50-250m 0 0 0 0 0	250-500m 0 0 0 0 0	- 500-2000m - - - - - - - 500-2000m
26 > Page 28 28 29 29 29 29 29 29 >	2.5 > Section 3.1 3.2 3.3 3.4 3.5 3.6 3.7 >	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions >	On site 0 0 0 0 0 0 0	0-50m 0 0 0 0	50-250m 0 0 0 0 0 0	250-500m 0 0 0 0 0 0 6	- - - - -
26 > Page 28 28 29 29 29 29 29 Page	2.5 > Section 3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use >	On site O O O O O O O O O O O O O O O O O O	0-50m 0 0 0 0 0 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 0 50-250m	250-500m 0 0 0 0 0 0 6	- - - - -
26 > Page 28 28 29 29 29 29 29 31 >	2.5 > Section 3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section 4.1 >	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use > Recent industrial land uses >	On site O O O O O O O O O The site 1	0-50m 0 0 0 0 0 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 50-250m	250-500m 0 0 0 0 0 6 250-500m	- - - - -
26 > Page 28 28 29 29 29 29 29 21 29 > Page 31 > 32	2.5 > Section 3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section 4.1 > 4.2	Waste and landfill > Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use > Recent industrial land uses > Current or recent petrol stations	On site 0 0 0 0 0 0 0 On site 1 0	0-50m 0 0 0 0 0 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 50-250m 6	250-500m 0 0 0 0 0 6 250-500m	- - - - -





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

33	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
33	4.7	Regulated explosive sites	0	0	0	0	-
33	4.8	Hazardous substance storage/usage	0	0	0	0	-
33	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
34	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
<u>34</u> >	<u>4.11</u> >	<u>Licensed pollutant release (P art A(2)/B)</u> >	0	0	1	1	-
34	4.12	Radioactive Substance Authorisations	0	0	0	0	-
<u>34</u> >	<u>4.13</u> >	<u>Licensed Discharges to controlled waters</u> >	0	0	8	4	-
36	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
37	4.15	Pollutant release to public sewer	0	0	0	0	-
37	4.16	List 1 Dangerous Substances	0	0	0	0	-
37	4.17	List 2 Dangerous Substances	0	0	0	0	-
37	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
37	4.19	Pollution inventory substances	0	0	0	0	-
38	4.20	Pollution inventory waste transfers	0	0	0	0	-
38	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
<u>39</u> >	<u>5.1</u> >	<u>Superficial aquifer</u> >	Identified (within 500m)		
<u>41</u> >	<u>5.2</u> >	Bedrock aquifer >	Identified (within 500m)		
<u>42</u> >	<u>5.3</u> >	Groundwater vulnerability >	Identified (within 50m)			
43	5.4	Groundwater vulnerability- soluble rock risk	None (with	in 0m)			
43	5.5	Groundwater vulnerability- local information	None (with	in 0m)			
<u>44</u> >	<u>5.6</u> >	<u>Groundwater abstractions</u> >	0	0	0	0	4
45	5.7	Surface water abstractions	0	0	0	0	0
						0	0
46	5.8	Potable abstractions	0	0	0	0	O
46 46	5.85.9	Potable abstractions Source Protection Zones	0	0	0	0	-
							-
46	5.9	Source Protection Zones	0	0	0	0	- - 500-2000m
46	5.9 5.10	Source Protection Zones Source Protection Zones (confined aquifer)	0	0	0	0	



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

<u>48</u> >	<u>6.2</u> >	<u>Surface water features</u> >	0	0	2	-	-
<u>48</u> >	<u>6.3</u> >	WFD Surface water body catchments >	1	-	-	-	-
<u>49</u> >	<u>6.4</u> >	WFD Surface water bodies >	0	0	1	-	-
49	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
50	7.1	Risk of flooding from rivers and the sea	None (with	in 50m)			
51	7.2	Historical Flood Events	0	0	0	-	-
51	7.3	Flood Defences	0	0	0	-	-
<u>51</u> >	<u>7.4</u> >	Areas Benefiting from F lood Defences >	0	0	2	-	-
51	7.5	Flood Storage Areas	0	0	0	-	-
52	7.6	Flood Zone 2	None (with	in 50m)			
52	7.7	Flood Zone 3	None (with	in 50m)			
Page	Section	Surface water flooding >					
<u>53</u> >	<u>8.1</u> >	Surface water flooding >	1 in 30 yea	r, 0.3m - 1.0	m (within 50	m)	
Page	Section	Groundwater flooding >					
Page <u>55</u> >	Section 9.1 >	Groundwater flooding > Groundwater flooding >	High (withi	n 50m)			
			High (withi	n 50m) _{0-50m}	50-250m	250-500m	500-2000m
<u>55</u> >	<u>9.1</u> >	Groundwater flooding >			50-250m	250-500m	500-2000m 2
<u>55</u> >	9.1 > Section	Groundwater flooding > Environmental designations >	On site	0-50m			
55 > Page 56 >	9.1 > Section 10.1 >	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) >	On site	0-50m	0	0	2
55 > Page 56 > 57	9.1 > Section 10.1 > 10.2	Groundwater flooding > Environmental designations > Stes of S pecial S cientific Interest (S SSI) > Conserved wetland sites (Ramsar sites)	On site O	0-50m O	0	0	2
55 > Page 56 > 57 >	9.1 > Section 10.1 > 10.2 10.3 >	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ >	On site O O	0-50m 0 0	0 0	0 0	2 0
55 > Page 56 > 57 57 >	9.1 > Section 10.1 > 10.2 10.3 > 10.4	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ > Special Protection Areas (SPA)	On site 0 0 0 0	0-50m 0 0	0 0 0	0 0 0	2 0 1 0
55 > Page 56 > 57 > 57 > 57 > 58 >	9.1 > Section 10.1 > 10.2 10.3 > 10.4 10.5 >	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ > Special Protection Areas (SPA) National Nature Reserves (NNR) >	On site 0 0 0 0 0	0-50m 0 0 0	0 0 0 0	0 0 0 0	2 0 1 0
55 > Page 56 > 57 > 57 > 58 > 58 >	9.1 > Section 10.1 > 10.2 10.3 > 10.4 10.5 >	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ > Special Protection Areas (SPA) National Nature Reserves (NNR) > Local Nature Reserves (LNR) >	On site 0 0 0 0 0 0 0	0-50m 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	2 0 1 0 1
55 > Page 56 > 57 > 57 > 58 > 58 > 59	9.1 > Section 10.1 > 10.2 10.3 > 10.4 10.5 > 10.6 > 10.7	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ > Special Protection Areas (SPA) National Nature Reserves (NNR) > Local Nature Reserves (LNR) > Designated Ancient Woodland	On site O O O O O O O	0-50m 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 1	2 0 1 0 1 9
55 > Page 56 > 57 > 57 > 58 > 58 > 59 >	9.1 > Section 10.1 > 10.2 10.3 > 10.4 10.5 > 10.6 > 10.7 10.8	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ > Special Protection Areas (SPA) National Nature Reserves (NNR) > Local Nature Reserves (LNR) > Designated Ancient Woodland Biosphere Reserves	On site O O O O O O O O O O O O	0-50m 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 1 0	2 0 1 0 1 9 0
55 > Page 56 > 57 > 57 > 58 > 58 > 59 > 59 >	9.1 > Section 10.1 > 10.2 10.3 > 10.4 10.5 > 10.6 > 10.7 10.8 10.9	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ > Special Protection Areas (SPA) National Nature Reserves (NNR) > Local Nature Reserves (LNR) > Designated Ancient Woodland Biosphere Reserves Forest Parks	On site O O O O O O O O O O O O O O O O O O	0-50m 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 1 0	2 0 1 0 1 9 0 0
55 > Page 56 > 57 > 57 > 58 > 58 > 59 > 59 > 59 >	9.1 > Section 10.1 > 10.2 10.3 > 10.4 10.5 > 10.6 > 10.7 10.8 10.9 10.10	Groundwater flooding > Environmental designations > Stes of Special Scientific Interest (SSS) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAQ > Special Protection Areas (SPA) National Nature Reserves (NNR) > Local Nature Reserves (LNR) > Designated Ancient Woodland Biosphere Reserves Forest Parks Marine Conservation Zones	On site O O O O O O O O O O O O O O O O O O	0-50m 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 1 0 0	2 0 1 0 1 9 0 0





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60	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
60	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
60	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<u>61</u> >	<u>10.16</u> >	Nitrate Vulnerable Z ones >	0	0	1	0	2
<u>62</u> >	<u>10.17</u> >	SSSI Impact Risk Zones >	1	-	-	-	-
<u>63</u> >	<u>10.18</u> >	SSSI Units >	0	0	0	0	5
Page	Section	<u>Visual and cultural designations</u> >	On site	0-50m	50-250m	250-500m	500-2000m
66	11.1	World Heritage Sites	0	0	0	-	-
67	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
67	11.3	National Parks	0	0	0	-	-
67	11.4	Listed Buildings	0	0	0	-	-
<u>67</u> >	<u>11.5</u> >	Conservation Areas >	0	0	4	-	-
68	11.6	Scheduled Ancient Monuments	0	0	0	-	-
68	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
	Section <u>12.1</u> >	Agricultural designations > Agricultural Land Classification >	On site Urban (with		50-250m	250-500m	500-2000m
Page					50-250m O	250-500m	500-2000m
Page <u>69</u> >	<u>12.1</u> >	Agricultural Land Classification >	Urban (with	nin 250m)		250-500m - -	500-2000m
Page 69 > 70	12.1 > 12.2	Agricultural Land Classification > Open Access Land	Urban (with	nin 250m)	0	250-500m - -	500-2000m - -
Page 69 > 70 70	12.1 > 12.2 12.3	Agricultural Land Classification > Open Access Land Tree Felling Licences	Urban (with 0	nin 250m) 0	0	250-500m	500-2000m
Page 69 > 70 70 70	12.1 > 12.2 12.3 12.4	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes	Urban (with 0 0	nin 250m) 0 0	0 0	250-500m 250-500m	500-2000m 500-2000m
Page 69 > 70 70 70 70	12.1 > 12.2 12.3 12.4 12.5	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes	Urban (with 0 0 0 0	nin 250m) 0 0 0	0 0 0	- - -	
Page 69 > 70 70 70 70 Page	12.1 > 12.2 12.3 12.4 12.5 Section	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations	Urban (with 0 0 0 0 O On site	0 0 0 0 0 0	0 0 0 0 50-250m	- - -	- - -
Page 69 > 70 70 70 70 Page 71	12.1 > 12.2 12.3 12.4 12.5 Section 13.1	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory	Urban (with 0 0 0 0 On site	o o o o o o o o o o o o o o o o o o o	0 0 0 0 50-250m	- - -	- - -
Page 69 > 70 70 70 70 Page 71 71	12.1 > 12.2 12.3 12.4 12.5 Section 13.1 13.2	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory Habitat Networks	Urban (with 0 0 0 0 On site	o o o o o o o o o o o o o o o o o o o	0 0 0 0 50-250m	- - -	- - -
Page 69 > 70 70 70 70 Page 71 71	12.1 > 12.2 12.3 12.4 12.5 Section 13.1 13.2 13.3	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory Habitat Networks Open Mosaic Habitat	Urban (with 0 0 0 0 On site 0	0 0 0 0 0-50m 0	0 0 0 0 50-250m 0	- - -	- - -
Page 69 > 70 70 70 70 Page 71 71 71 71	12.1 > 12.2 12.3 12.4 12.5 Section 13.1 13.2 13.3 13.4	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory Habitat Networks Open Mosaic Habitat Limestone Pavement Orders	Urban (with 0 0 0 0 On site 0 On site	0 0 0 0 0-50m 0	0 0 0 0 50-250m 0 0 0	- - - 250-500m - - -	- - - 500-2000m - -
Page 69 > 70 70 70 70 Page 71 71 71 Page	12.1 > 12.2 12.3 12.4 12.5 Section 13.1 13.2 13.3 13.4 Section	Agricultural Land Classification > Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory Habitat Networks Open Mosaic Habitat Limestone Pavement Orders Geology 1:10,000 scale >	Urban (with 0 0 0 0 On site 0 On site	0 0 0 0 0-50m 0 0	0 0 0 0 50-250m 0 0 0	- - - 250-500m - - -	- - - 500-2000m - -





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

7 5	14.4	Landslip (10k)	0	0	0	0	-
<u>76</u> >	<u>14.5</u> >	Bedrock geology (10k) >	1	0	0	0	-
77	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	<u>Geology 1:50,000 scale</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>78</u> >	<u>15.1</u> >	50k Availability >	Identified (within 500m)		
79	15.2	Artificial and made ground (50k)	0	0	0	0	-
79	15.3	Artificial ground permeability (50k)	0	0	-	-	-
<u>80</u> >	<u>15.4</u> >	Superficial geology (50k) >	1	0	1	5	-
<u>81</u> >	<u>15.5</u> >	<u>Superficial permeability (50k)</u> >	Identified (within 50m)			
81	15.6	Landslip (50k)	0	0	0	0	-
81	15.7	Landslip permeability (50k)	None (with	in 50m)			
<u>82</u> >	<u>15.8</u> >	Bedrock geology (50k) >	1	0	0	0	-
<u>83</u> >	<u>15.9</u> >	Bedrock permeability (50k) >	Identified (within 50m)			
83	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
<u>84</u> >	<u>16.1</u> >	BGSBoreholes >	0	0	3	-	-
Page	Section	Natural ground subsidence >					
<u>86</u> >	<u>17.1</u> >	Shrink swell clays >	Negligible	(within 50m)			
<u>87</u> >	<u>17.2</u> >	Running sands >	Very low (v	vithin 50m)			
<u>88</u> >	<u>17.3</u> >	<u>Compressible deposits</u> >	Negligible	(within 50m)			
<u>89</u> >	<u>17.4</u> >	<u>Collapsible deposits</u> >	Very low (v	vithin 50m)			
<u>90</u> >	<u>17.5</u> >	<u>Landslides</u> >	Very low (v	vithin 50m)			
<u>91</u> >	<u>17.6</u> >	Ground dissolution of soluble rocks >	Negligible	(within 50m)			
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
93	18.1	BritPits	0	0	0	0	-
94 >	<u>18.2</u> >	<u>Surface ground workings</u> >	0	0	16	-	-
94	18.3	Underground workings	0	0	0	0	0
95	18.4	Underground mining extents	0	0	0	0	-





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

95	18.6	Non-coal mining	0	0	0	0	0
95	18.7	JPB mining areas	None (with	in 0m)			
95	18.8	The Coal Authority non-coal mining	0	0	0	0	-
96	18.9	Researched mining	0	0	0	0	-
96	18.10	Mining record office plans	0	0	0	0	-
96	18.11	BGS mine plans	0	0	0	0	-
96	18.12	Coal mining	None (with	in 0m)			
97	18.13	Brine areas	None (with	in 0m)			
97	18.14	Gypsum areas	None (with	in 0m)			
97	18.15	Tin mining	None (with	in 0m)			
97	18.16	Clay mining	None (with	in 0m)			
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
98	19.1	Natural cavities	0	0	0	0	-
98	19.2	Mining cavities	0	0	0	0	0
98	19.3	Reported recent incidents	0	0	0	0	-
98	19.4	Historical incidents	0	0	0	0	-
99	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
<u>100</u> >	<u>20.1</u> >	Radon >	Less than 1	% (within Or	n)		
Page	Section	Soil chem istry >	On site	0-50m	50-250m	250-500m	500-2000m
<u>102</u> >	<u>21.1</u> >	BCS Estimated Background Soil Chemistry >	1	0	-	-	-
<u>102</u> >	<u>21.2</u> >	BCS Estimated Urban Soil Chemistry >	3	1	-	-	-
103	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
104	22.1	Underground railways (London)	0	0	0	-	-
104	22.2	Underground railways (Non-London)	0	0	0	-	-
105	22.3	Railway tunnels	0	0	0	-	-
<u>105</u> >	<u>22.4</u> >	Historical railway and tunnel features >	0	0	3	-	-
105	22.5	Royal Mail tunnels	0	0	0	-	-





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

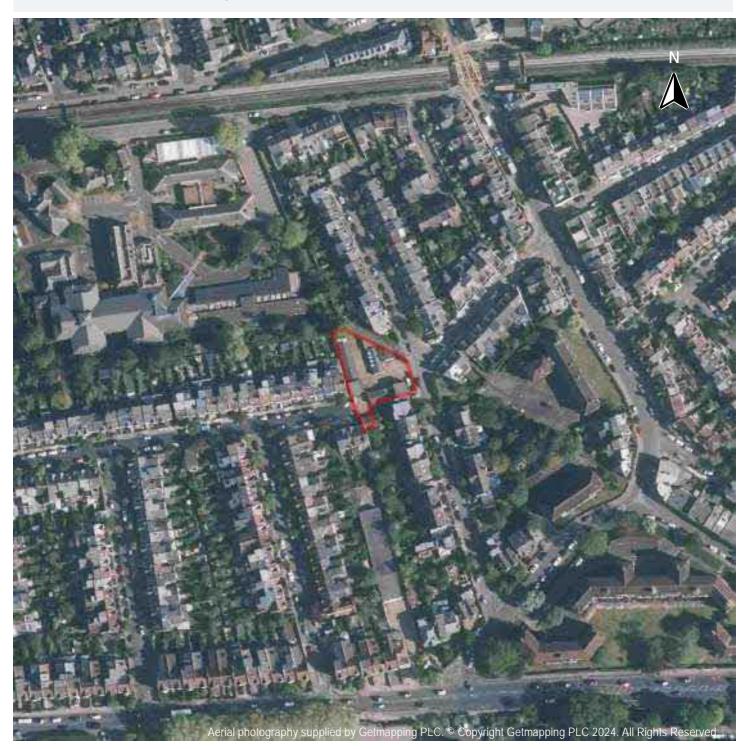
105	22.6	Historical railways	0	0	0	-	-
<u>106</u> >	<u>22.7</u> >	Railways >	0	0	4	-	-
106	22.8	Crossrail 1	0	0	0	0	-
106	22.9	Crossrail 2	0	0	0	0	-
106	22.10	HS2	0	0	0	0	_





Recent aerial photograph

Groundsure



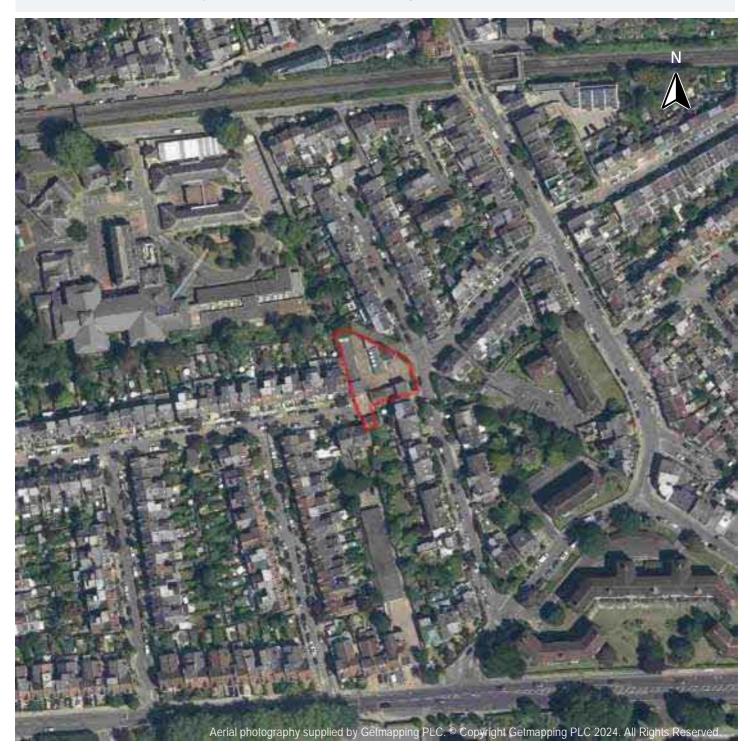
Capture Date: 30/04/2022





Recent site history - 2021 aerial photograph

Groundsure



Capture Date: 13/06/2021



1, FITZGERALD AVENUE, EAST SHEEN,

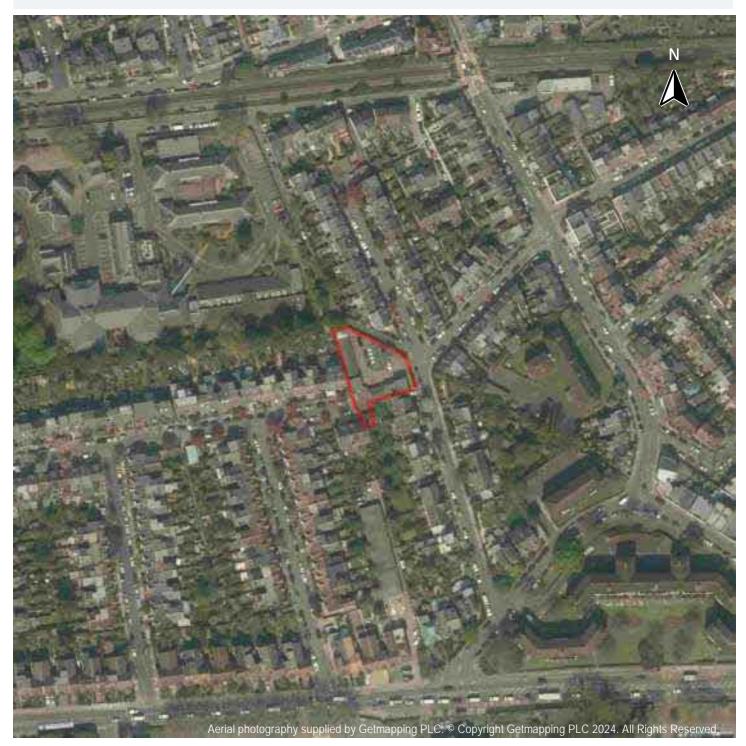
Ref: GS-YTL-2SD-1Y5-4JZ

Grid ref: 521315 175626

Your ref: P16494

Recent site history - 2015 aerial photograph

Groundsure



Capture Date: 20/04/2015



Recent site history - 2011 aerial photograph

Groundsure



Capture Date: 30/09/2011



Recent site history - 1999 aerial photograph

Groundsure



Capture Date: 04/09/1999





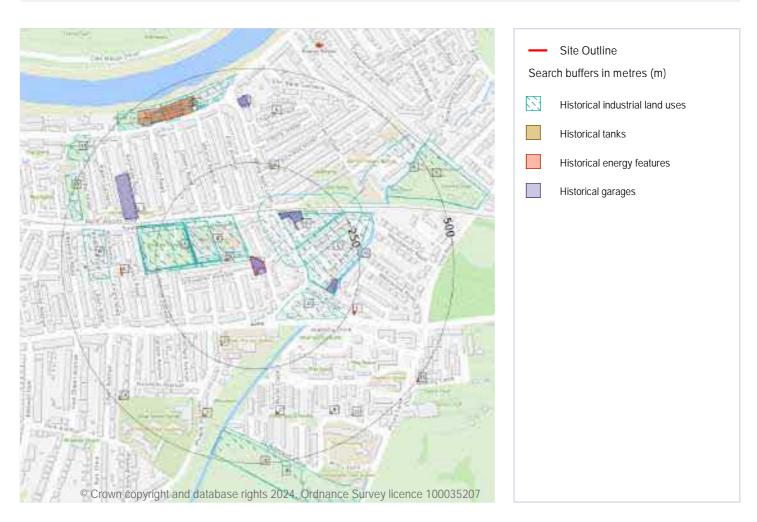








1 Past land use



1.1 Historical industrial land uses

Records within 500m 32

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 15 >

ID	Location	Land use	Dates present	Group ID
В	2m NW	Hospital	1920 - 1962	2266342





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Land use	Dates present	Group ID
В	7m NW	Hospital	1967 - 1987	2273174
В	18m NW	Hospital	1910	2274682
С	44m NE	Nursery	1894	2221702
В	76m W	Hospital	1898 - 1911	2248357
В	77m W	Hospital	1893	2213526
В	82m W	Hospital	1894	2205177
Е	93m NE	Nursery	1911	2238997
Е	94m NE	Nursery	1893	2239558
С	97m NE	Nursery	1898	2237517
1	107m S E	Corporation Y ard	1958 - 1962	2235322
F	139m W	Cemetery	1866	2198819
F	140m W	Cemetery	1898 - 1911	2214883
F	141m W	Cemetery	1893 - 1894	2175422
F	142m W	Cemetery	1920 - 1962	2219760
F	143m W	Cemetery	1967 - 1987	2257055
F	146m W	Cemetery	1910	2209930
4	278m NE	Nursery	1894	2202533
5	371m NE	Nursery	1893	2170769
M	376m W	Burial Ground	1866	2142006
8	412m S	Nurseries	1895	2178990
0	413m NW	Fire Engine Station	1958 - 1962	2262885
0	413m NW	Unspecified Works	1958 - 1962	2269745
0	416m N	Fire Engine Station	1938	2222861
0	416m N	Fire Engine Station	1920	2224847
0	418m NW	Electricity Works	1920	2206553
10	422m S	Nurseries	1899	2269938
0	426m NW	Unspecified Commercial/Industrial	1933	2130754
0	433m NW	Fire Engine Station	1910	2215774



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Land use	Dates present	Group ID
0	438m NW	Electricity Works	1910	2171594
13	453m W	Gravel Pit	1866	2138962
15	496m NW	Grave Yard	1866	2145669

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

Tank features digitised from historical O rdnance 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 ungrouped 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 15 >

ID	Location	Land use	Dates present	Group ID
3	237m N	Unspecified Tank	1916	363198
6	384m N	Unspecified Tank	1870	363357
12	447m SE	Unspecified Tank	1968	363197

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m 26

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 ungrouped 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 15 >

ID	Location	Land use	Dates present	Group ID
D	58m W	Electricity Substation	1991	258928
D	60m W	Electricity Substation	1991 - 1993	287882





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Land use	Dates present	Group ID
2	202m SW	Electricity Substation	1978 - 1991	277285
Н	258m E	Electricity Substation	1991	256359
Н	259m E	Electricity Substation	1991	253149
I	263m SE	Electricity Substation	1991	254616
	263m SE	Electricity Substation	1968 - 1979	258519
I	263m SE	Electricity Substation	1991 - 1994	277373
	264m SE	Electricity Substation	1979	256799
	264m SE	Electricity Substation	1991	255303
J	321m NW	Electricity Substation	1994	243806
J	327m NW	Electricity Substation	1968	259138
J	327m NW	Electricity Substation	1982 - 1991	287702
K	341m W	Electricity Substation	1982 - 1991	264366
K	341m W	Electricity Substation	1968 - 1994	272534
L	369m S	Electricity Substation	1978 - 1991	274092
L	369m S	Electricity Substation	1991	285016
7	394m S	Electricity Substation	1978 - 1991	262880
9	413m SE	Electricity Substation	1979 - 1994	273555
0	414m NW	Electricity Works	1972	256710
0	414m NW	Electricity Works	1951 - 1966	263449
0	418m NW	Electricity Works	1913 - 1919	264480
M	435m W	Electricity Substation	1968 - 1994	282666
11	438m NW	Electricity Depot	1951	249921
14	483m SW	Electricity Substation	1972 - 1991	289465
16	499m SE	Electricity Substation	1979 - 1994	262558

This data is sourced from Ordnance Survey / Groundsure.





1.4 Historical petrol stations

Records within 500m

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 ungrouped 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

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 ungrouped 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 15 >

ID	Location	Land use	Dates present	Group ID
Α	On site	Garage	1980	77175
Α	On site	Garage	1993	82385
Α	On site	Garage	1951 - 1966	82444
Α	On site	Garage	1991	83705
С	122m NE	Garage	1993	82311
С	123m NE	Garage	1966 - 1991	84823
С	123m NE	Garage	1980	76520
С	124m NE	Garage	1991	76219
G	170m E	Garage	1963 - 1991	80596
G	170m E	Garage	1951	83027
G	173m E	Garage	1979 - 1991	81877
J	313m W	Omnibus Garage	1919	74019
J	317m W	Garage	1913	73223
Ν	395m N	Garage	1972	76599





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Land use	Dates present	Group ID
Ν	401m N	Garage	1991 - 1992	83456
Ν	402m N	Garage	1991	77883

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



2.1 Historical industrial land uses

Records within 500m 55

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original ungrouped 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
В	2m NW	Hospital	1920	2266342
В	2m NW	Hospital	1938	2266342
В	2m NW	Hospital	1962	2266342

info@groundsure.com /

01273 257 755





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Land Use	Date	Group ID
В	6m NW	Hospital	1933	2266342
В	7m NW	Hospital	1987	2273174
В	7m NW	Hospital	1974	2273174
В	7m NW	Hospital	1967	2273174
В	9m NW	Hospital	1958	2266342
В	9m NW	Hospital	1947	2266342
В	18m NW	Hospital	1933	2266342
В	18m NW	Hospital	1910	2274682
С	44m NE	Nursery	1894	2221702
В	76m W	Hospital	1898	2248357
В	77m W	Hospital	1893	2213526
В	80m W	Hospital	1911	2248357
В	82m W	Hospital	1894	2205177
D	93m NE	Nursery	1911	2238997
D	94m NE	Nursery	1893	2239558
С	97m NE	Nursery	1898	2237517
Е	107m S E	Corporation Y ard	1962	2235322
Е	108m S E	Corporation Y ard	1958	2235322
F	139m W	Cemetery	1866	2198819
F	140m W	Cemetery	1898	2214883
F	141m W	Cemetery	1893	2175422
F	142m W	Cemetery	1933	2219760
F	142m W	Cemetery	1962	2219760
F	143m W	Cemetery	1987	2257055
F	143m W	Cemetery	1974	2257055
F	143m W	Cemetery	1967	2257055
F	143m W	Cemetery	1911	2214883
F	144m W	Cemetery	1958	2219760





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Land Use	Date	Group ID
F	144m W	Cemetery	1947	2219760
F	146m W	Cemetery	1933	2219760
F	146m W	Cemetery	1910	2209930
F	146m W	Cemetery	1894	2175422
F	148m W	Cemetery	1920	2219760
F	148m W	Cemetery	1938	2219760
2	278m NE	Nursery	1894	2202533
3	371m NE	Nursery	1893	2170769
Ν	376m W	Burial Ground	1866	2142006
Q	412m S	Nurseries	1895	2178990
S	413m NW	Fire Engine Station	1962	2262885
S	413m NW	Unspecified Works	1962	2269745
S	416m N	Fire Engine Station	1920	2224847
S	416m N	Fire Engine Station	1938	2222861
S	416m NW	Unspecified Works	1958	2269745
S	418m NW	Electricity Works	1920	2206553
Q	421m S	Nurseries	1895	2178990
5	422m S	Nurseries	1899	2269938
S	423m N	Fire Engine Station	1958	2262885
S	426m NW	Unspecified Commercial/Industrial	1933	2130754
S	433m NW	Fire Engine Station	1910	2215774
S	438m NW	Electricity Works	1910	2171594
7	453m W	Gravel Pit	1866	2138962
8	496m NW	Grave Yard	1866	2145669

This data is sourced from Ordnance Survey / Groundsure.





2.2 Historical tanks

Records within 500m

Tank features digitised from historical O rdnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale 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
1	237m N	Unspecified Tank	1916	363198
4	384m N	Unspecified Tank	1870	363357
6	447m SE	Unspecified Tank	1968	363197

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m 55

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
В	58m W	Electricity Substation	1991	258928
В	60m W	Electricity Substation	1993	287882
В	60m W	Electricity Substation	1993	287882
В	60m W	Electricity Substation	1991	287882
Н	202m S W	Electricity Substation	1978	277285
Н	202m S W	Electricity Substation	1991	277285
	258m E	Electricity Substation	1991	256359
I	259m E	Electricity Substation	1991	253149
J	263m S E	Electricity Substation	1991	254616
J	263m S E	Electricity Substation	1979	258519
J	263m S E	Electricity Substation	1968	258519





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Land Use	Date	Group ID
J	263m SE	Electricity Substation	1994	277373
J	263m SE	Electricity Substation	1991	277373
J	264m SE	Electricity Substation	1979	256799
J	264m SE	Electricity Substation	1991	277373
J	264m SE	Electricity Substation	1991	255303
K	321m NW	Electricity Substation	1994	243806
K	327m NW	Electricity Substation	1968	259138
K	327m NW	Electricity Substation	1982	287702
K	327m NW	Electricity Substation	1991	287702
L	341m W	Electricity Substation	1982	264366
L	341m W	Electricity Substation	1991	264366
L	341m W	Electricity Substation	1968	272534
L	342m W	Electricity Substation	1994	272534
M	369m S	Electricity Substation	1978	274092
M	369m S	Electricity Substation	1978	274092
\mathbb{M}	369m S	Electricity Substation	1991	274092
M	369m S	Electricity Substation	1991	285016
0	394m S	Electricity Substation	1991	262880
0	395m S	Electricity Substation	1991	262880
0	395m S	Electricity Substation	1978	262880
0	395m S	Electricity Substation	1978	262880
R	413m SE	Electricity Substation	1979	273555
R	413m SE	Electricity Substation	1991	273555
R	414m SE	Electricity Substation	1994	273555
R	414m SE	Electricity Substation	1991	273555
S	414m NW	Electricity Works	1972	256710
S	414m NW	⊟ectricity Works	1951	263449
S	414m NW	Electricity Works	1951	263449



Ref: GS-YTL-2SD-1Y5-4JZ **Your ref**: P16494 **Grid ref**: 521315 175626

ID	Location	Land Use	Date	Group ID
S	416m NW	Electricity Works	1966	263449
S	416m NW	Electricity Works	1951	263449
S	416m NW	Electricity Works	1951	263449
S	418m NW	Electricity Works	1919	264480
S	419m NW	Electricity Works	1913	264480
Ν	435m W	Electricity Substation	1968	282666
Ν	436m W	Electricity Substation	1994	282666
Ν	436m W	Electricity Substation	1982	282666
Ν	436m W	Electricity Substation	1991	282666
S	438m NW	Electricity Depot	1951	249921
Т	483m SW	Electricity Substation	1991	289465
Т	483m SW	Electricity Substation	1972	289465
U	499m SE	Electricity Substation	1991	262558
U	499m SE	Electricity Substation	1979	262558
U	499m SE	Electricity Substation	1994	262558
U	499m SE	Electricity Substation	1991	262558

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

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 26

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 m ap on page 21 >

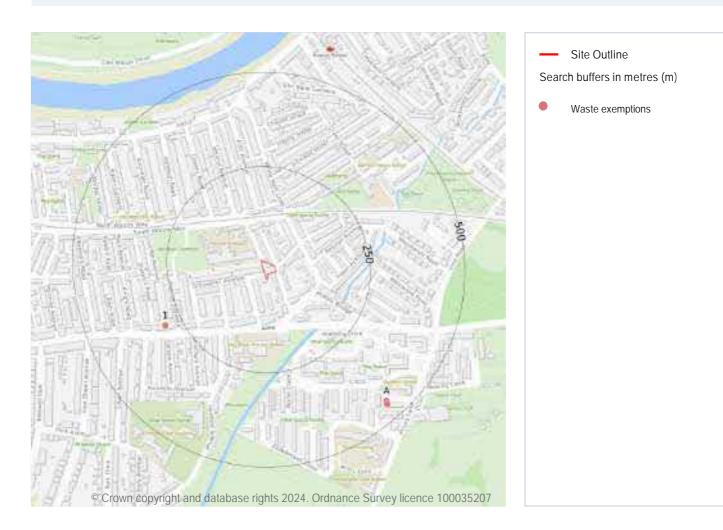
ID	Location	Land Use	Date	Group ID
Α	On site	Garage	1991	83705
Α	On site	Garage	1991	83705
Α	On site	Garage	1980	77175
Α	On site	Garage	1993	82385
Α	On site	Garage	1993	82385
Α	On site	Garage	1966	82444
Α	On site	Garage	1951	82444
С	122m NE	Garage	1993	82311
С	122m NE	Garage	1993	82311
С	123m NE	Garage	1991	84823
С	123m NE	Garage	1966	84823
С	123m NE	Garage	1980	76520
С	124m NE	Garage	1991	76219
G	170m E	Garage	1966	80596
G	170m E	Garage	1951	83027
G	172m E	Garage	1951	83027
G	172m E	Garage	1963	80596
G	172m E	Garage	1991	80596
G	173m E	Garage	1991	81877
G	173m E	Garage	1979	81877
K	313m W	Omnibus Garage	1919	74019
K	317m W	Garage	1913	73223
Р	395m N	Garage	1972	76599
Р	401m N	Garage	1991	83456
Р	401m N	Garage	1992	83456
Р	402m N	Garage	1991	77883

This data is sourced from Ordnance Survey / Groundsure.





3 Waste and landfill



3.1 Active or recent landfill

Records within 500m

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.



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3.3 Historical landfill (LA/mapping records)

Records within 500m

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

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 0

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

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

3.6 Licensed waste sites

Records within 500m 0

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

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

3.7 Waste exemptions

Records within 500m

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 28 >

ID	Location	Site	Reference	Category	Sub-Category	Description
1	296m SW	-	WEX356951	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal





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ID	Location	Site	Reference	Category	Sub-Category	Description
А	451m SE	6 Rockingham Close LONDON SW15 5RW	EPR/AF0804TB /A001	Treating waste exemption	Non- Agricultural Waste Only	Sorting and de-naturing of controlled drugs for disposal
А	458m SE	6, ROCKINGHAM CLOSE, LONDON, SW15 5RW	WEX274066	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
А	458m SE	6, ROCKINGHAM CLOSE, LONDON, SW15 5RW	WEX274066	Storing waste exemption	Not on a farm	Storage of waste in secure containers
А	458m SE	6, ROCKINGHAM CLOSE, LONDON, SW15 5RW	WEX133724	Storing waste exemption	Not on a farm	Storage of waste in secure containers
А	458m SE	6, ROCKINGHAM CLOSE, LONDON, SW15 5RW	WEX133724	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
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m 7

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 31 >

ID	Location	Company	Address	Activity	Category
1	On site	Benjamin at Grosvenor Garage	-, Fitzgerald Avenue, East Sheen, London, Greater London, SW14 8SZ	Vehicle Repair, Testing and Servicing	Repair and Servicing
2	62m W	Electricity Sub Station	Greater London, SW14	Electrical F eatures	Infrastructure and Facilities



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Company	Address	Activity	Category
А	126m N	Electricity Sub Stations	Greater London, SW14	Electrical Features	Infrastructure and Facilities
А	170m N	Architectura I Stained Glass	58, First Avenue, Mortlake, London, Greater London, SW14 8SR	Glass	Industrial Products
В	172m SE	Richardson Motors Barnes Ltd	26-28, Priests Bridge, East Sheen, London, Greater London, SW14 8TA	Vehicle Repair, Testing and Servicing	Repair and Servicing
4	199m N	Taylor & Marr Ltd	60, White Hart Lane, Barnes, London, Greater London, SW13 0PZ	Curtains and Blinds	Consumer Products
5	207m SW	Electricity Sub Station	Greater London, SW14	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m 0

Open, closed, under development and obsolete petrol stations.

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.



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

0

4.5 Sites determined as Contaminated Land

Records within 500m

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

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

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

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 2

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

Features are displayed on the Current industrial land use map on page 31 >

ID	Location	Address	Details	
В	127m E	White Hart Dry Cleaners, 155 White Hart Lane, Twickenham, SW13 0JP	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
6	446m SW	Hamlyns, 197 Upper Richmond Road West, East Sheen, London, SW14 8QT	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m 0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

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

Features are displayed on the Current industrial land use map on page 31 >





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Address	Details	
3	130m SE	26 PRIESTS BRIDGE, RICHMOND, LONDON, 26 PRIESTS BRIDGE, RICHMOND, LON, DON	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CTMR.0268 Permit Version: 1 Receiving Water: (BEVERLEY BROOK)	Status: REVOKED - UNSPECIFIED Issue date: 01/11/1976 Effective Date: 01/11/1976 Revocation Date: 07/09/1992
В	164m E	PRIESTS BRIDGE GARAGE, MORTLAKE, LO, PRIESTS BRIDGE GARAGE, MORTLAKE, LONDON SW14	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CTCU.0590 Permit Version: 1 Receiving Water: GRAVEL STRATA	Status: REVOKED - UNSPECIFIED Issue date: 14/02/1972 Effective Date: 14/02/1972 Revocation Date: 07/09/1992
В	185m SE	CSO AT UPPER RICHMOND ROAD, Upper Richmond Road, PRIESTS BRIDGE, LONDON, SW14 8TB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP .2982 Permit Version: 3 Receiving Water: BEVERLEY BROOK	Status: SURRENDERED UNDER EPR 2010 Issue date: 21/03/2019 Effective Date: 21/03/2019 Revocation Date: 18/10/2023
В	190m SE	PRIORY LANE, MORTLAKE CSO, PRIESTS BRIDGE, EAST SHEEN, RICHMOND, LONDON, SW14 8TA	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP.2837 Permit Version: 2 Receiving Water: Beverley Brook	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 06/05/2021
В	190m SE	PRIORY LANE, MORTLAKE CSO, PRIESTS BRIDGE, EAST SHEEN, RICHMOND, LONDON, SW14 8TA	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP .2837 Permit Version: 1 Receiving Water: BEVERLEY BROOK	Status: TEMPORARY CONSENTS (WATER ACT 1989, SECTION 113) Issue date: 02/11/1989 Effective Date: 02/11/1989 Revocation Date: 02/09/2010
В	190m SE	PRIORY LANE, MORTLAKE CSO, PRIESTS BRIDGE, EAST SHEEN, RICHMOND, LONDON, SW14 8TA	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP.2837 Permit Version: 3 Receiving Water: Beverley Brook	Status: VARIED UNDER EPR 2010 Issue date: 07/05/2021 Effective Date: 07/05/2021 Revocation Date: -
В	201m SE	CSO AT UPPER RICHMOND ROAD, Upper Richmond Road, PRIESTS BRIDGE, LONDON, SW14 8TB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP.2982 Permit Version: 2 Receiving Water: Beverley Broook	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 20/03/2019





Ref: GS-YTL-2SD-1Y5-4JZ **Your ref**: P16494 **Grid ref**: 521315 175626

ID	Location	Address	Details	
В	201m SE	CSO AT UPPER RICHM OND ROAD, Upper Richmond Road, PRIESTS BRIDGE, LONDON, SW14 8TB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP.2982 Permit Version: 1 Receiving Water: BEVERLEY BROOOK	Status: TEMPORARY CONSENTS (WATER ACT 1989, SECTION 113) Issue date: 02/11/1989 Effective Date: 02/11/1989 Revocation Date: 02/09/2010
С	399m S	Priory (Burke CI) Arrabella Dr, Priory (Burke CI) Arrabella Dr	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: TEMP.1738 Permit Version: 1 Receiving Water: BEVERLEY BROOK	Status: TEMPORARY CONSENTS (WATER ACT 1989, SECTION 113) Issue date: 02/11/1989 Effective Date: 02/11/1989 Revocation Date: 02/09/2010
С	399m S	Priory (Burke CI) Arrabella Dr, Priory (Burke CI) Arrabella Dr	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: TEMP.1738 Permit Version: 2 Receiving Water: Beverley Brook	Status: SURRENDERED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 19/08/2014
7	463m N	COURTYARD CARPARKS, TIDEWAY YARD, M, COURTYARD CARPARKS, TIDEWAY YARD, MORTLAKE HIGH STREET, MORTLAKE, LONDON	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CTWC.2359 Permit Version: 1 Receiving Water: RIVER THAMES TIDAL	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 05/05/1988 Effective Date: 05/05/1988 Revocation Date: 18/06/2010
8	494m NW	121 MORTLAKE HIGH STREET, MORTLAKE, 121 MORTLAKE HIGH STREET, MORTLA, KE, LONDON SW14	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CTWC.2358 Permit Version: 1 Receiving Water: RIVER THAMES	Status: REVOKED - UNSPECIFIED Issue date: 05/05/1988 Effective Date: 05/05/1988 Revocation Date: 06/06/1991

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

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.



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

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

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

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

4.19 Pollution inventory substances

Records within 500m

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.



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

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 0

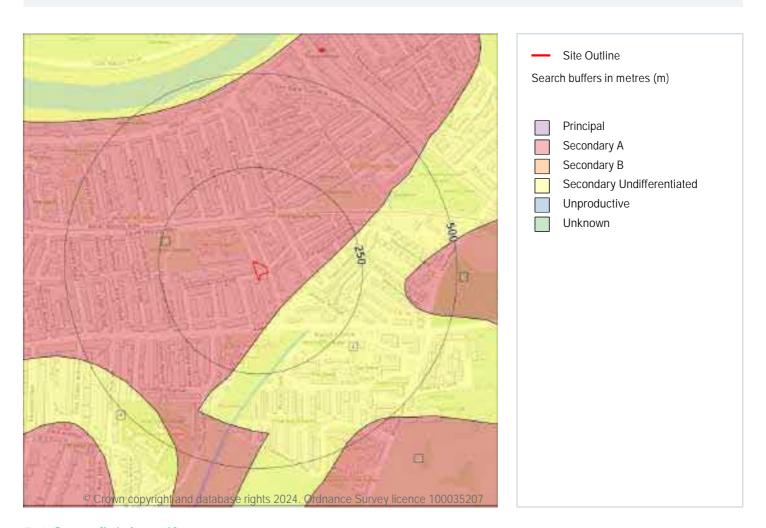
The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

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 5

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 39 >

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	88m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 **Grid ref**: 521315 175626

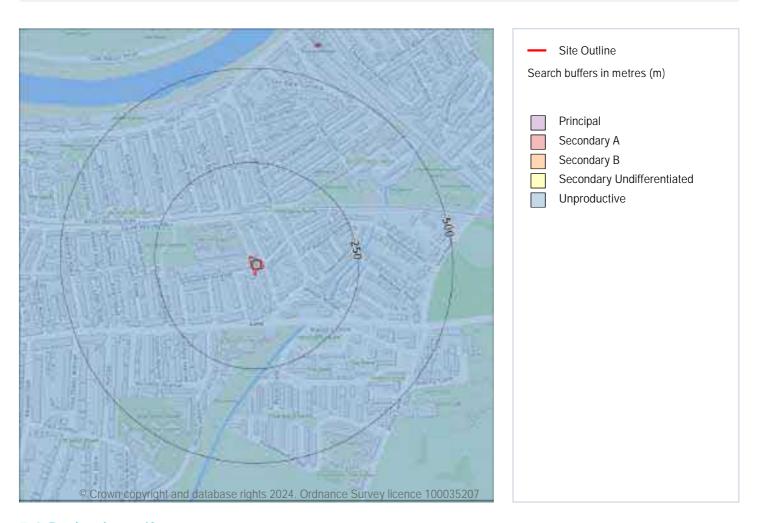
ID	Location	Designation	Description
3	364m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	437m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	479m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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





Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 41 >

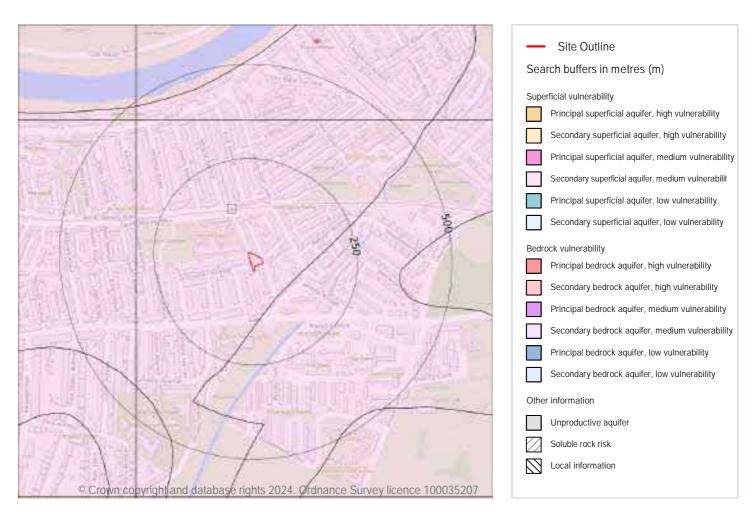
ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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





Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

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 42 >



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High	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

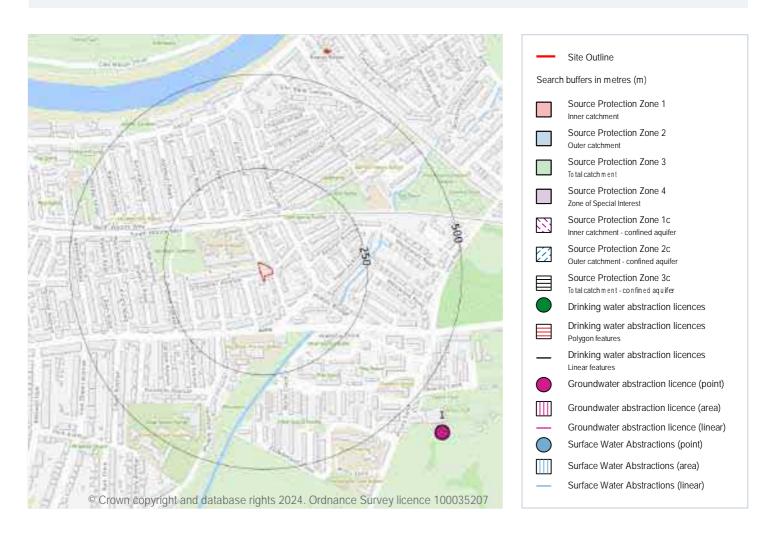
This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 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



5.6 Groundwater abstractions

Records within 2000m 4

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 44 >





Ref: GS-YTL-2SD-1Y5-4JZ **Your ref**: P16494 **Grid ref**: 521315 175626

ID	Location	Details	
1	614m SE	Status: Active Licence No: TH/039/0040/004 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT ROEHAMPTON CLUB Data Type: Point Name: Roehampton Club Limited Easting: 521784 Northing: 175197	Annual Volume (m³): 34960 Max Daily Volume (m³): 264 Original Application No: NPS/WR/022248 Original Start Date: 03/10/2017 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 03/10/2017 Version End Date: -
-	759m N	Status: Historical Licence No: 28/39/39/0174 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: DUKES MEADOW, CHISWICK - BOREHOLE Data Type: Point Name: RIVERSIDE RACQUETS CLUB LTD Easting: 521200 Northing: 176400	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 08/12/1993 Expiry Date: - Issue No: 100 Version Start Date: 08/12/1993 Version End Date: -
-	1043m NW	Status: Active Licence No: 28/39/39/0180 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: DUKES MEADOW GOLF CLUB, LONDON - BOREHOLE Data Type: Point Name: D & D LEISURE SPORTS LTD Easting: 520500 Northing: 176320	Annual Volume (m³): 8000 Max Daily Volume (m³): 55 Original Application No: WRA/6526 Original Start Date: 04/09/1997 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1308m N	Status: Active Licence No: TH/039/0039/178 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT KINGS HOUSE SCHOOL CHISWICK Data Type: Point Name: King's House School Trust (Richmond) Limited Easting: 521210 Northing: 176953	Annual Volume (m³): 17664 Max Daily Volume (m³): 96 Original Application No: NPS/WR/034560 Original Start Date: 29/03/2022 Expiry Date: 31/03/2037 Issue No: 1 Version Start Date: 29/03/2022 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m 0

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.



Ref: GS-YTL-2SD-1Y5-4JZ **Your ref**: P16494 **Grid ref**: 521315 175626

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

5.8 Potable abstractions

Records within 2000m

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.

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

5.9 Source Protection Zones

Records within 500m

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

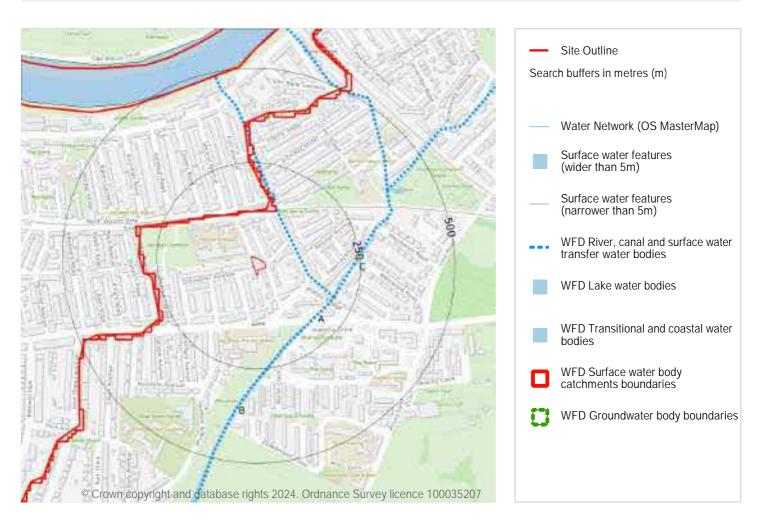
Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwate to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

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





6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m 6

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

Features are displayed on the Hydrology map on page 47 >

ID	Location	Type of water feature	Ground level	Permanence	Name
1	89m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Type of water feature	Ground level	Permanence	Name
А	183m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Beverley Brook
В	185m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Beverley Brook
А	190m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Beverley Brook
А	192m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
С	196m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Beverley Brook

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m 2

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.

Features are displayed on the Hydrology map on page 47 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

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 47 >



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1

Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Тур е	Water body catchment	Water body ID	Operational catchment	Management catchment
Α	On site	Rive r	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Bar	GB106039022850	Beverley Brook	London

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

6.4 WFD Surface water bodies

Records identified 1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the he 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.

Features are displayed on the Hydrology map on page 47 >

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
2	90m NE	River	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Bar	<u>GB106039022850</u> ₹	Moderate	Fail	Moderate	2019

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.

01273 257 755

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

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) 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.



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7.2 Historical Flood Events

Records within 250m

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1 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

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Re 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 2

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.

Features are displayed on the River and coastal flooding map on page 50 >

ID	Location					
А	110m NE	Area benefiting from flood defences				
2	150m N Area benefiting from flood defences					

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

7.5 Flood Storage Areas

Records within 250m

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.



Date: 24 February 2024

0



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

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

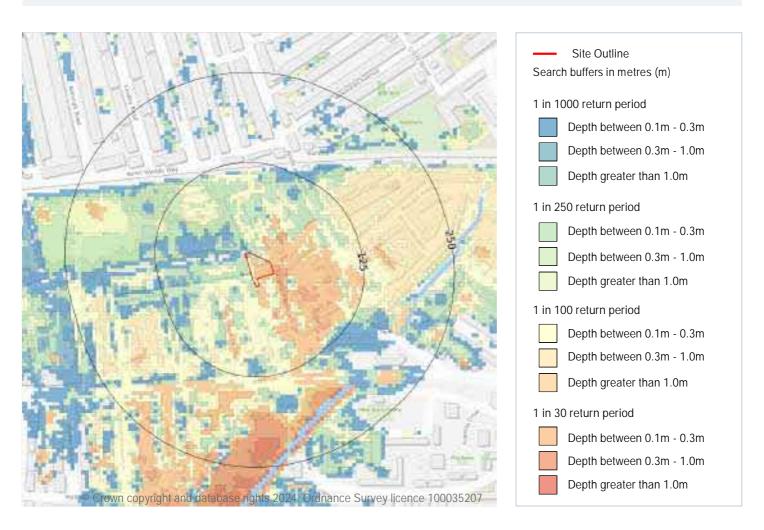
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

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





8 Surface water flooding



8.1 Surface water flooding

Highest risk on site 1 in 30 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

Date: 24 February 2024

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 53 >

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.



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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	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiental Risk Analytics.





9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site High

Highest risk within 50m

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 55 >

This data is sourced from Ambiental Risk Analytics.



High



10 Environmental designations



Site Outline
Search buffers in metres (m)
✓ Sites of Special Scientific Interest (SS
✓ Special Areas of Conservation (SAC)
✓ National Nature Reserves (NNR)
✓ Local Nature Reserves (LNR)

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m 2

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or ph features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were renotified 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.

Features are displayed on the Environmental designations map on page 56 >

ID	Location	Name	Data source
А	1192m SW	Richmond Park	Natural England



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Name	Data source
-	1781m NE	Barn Elms Wetland Centre	Natural England

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

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.

Features are displayed on the Environmental designations map on page 56 >

ID	Location	Name	Features of interest	Habitat description	Data source
А	1192m SW	Richmond Park	Stag beetle.	Dry grassland, Steppes; Broad-leaved deciduous woodland; Inland water bodies (Standing water, Running water); Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland	Natural England

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 in 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.



Contact us with any questions at: Date: 24 February 2024



10.5 National Nature Reserves (NNR)

Records within 2000m

Sites containing examples of some of the most important natural and semi-natural terrestrial are 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.

Features are displayed on the Environmental designations map on page 56 >

ID	Location	Name	Data source
А	1192m SW	Richmond Park	Natural England

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

10.6 Local Nature Reserves (LNR)

Records within 2000m 10

Sites managed for nature conservation, and to provide opportunities for research and educatic 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 56 >

ID	Location	Name	Data source
1	445m E	Barnes Common	Natural England
2	662m N	Duke's Hollow	Natural England
3	675m E	Barnes Common	Natural England
4	784m E	Barnes Common	Natural England
5	812m NE	Barnes Common	Natural England
6	855m NE	Barnes Common	Natural England
7	915m E	Barnes Common	Natural England
8	1167m E	Barnes Common	Natural England
9	1238m E	Barnes Common	Natural England
-	1394m N	Leg of Mutton Reservoir	Natural England

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



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10.7 Designated Ancient Woodland

Records within 2000m

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

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.



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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 rance 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

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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.



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

10.16 Nitrate Vulnerable Zones

Records within 2000m

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.

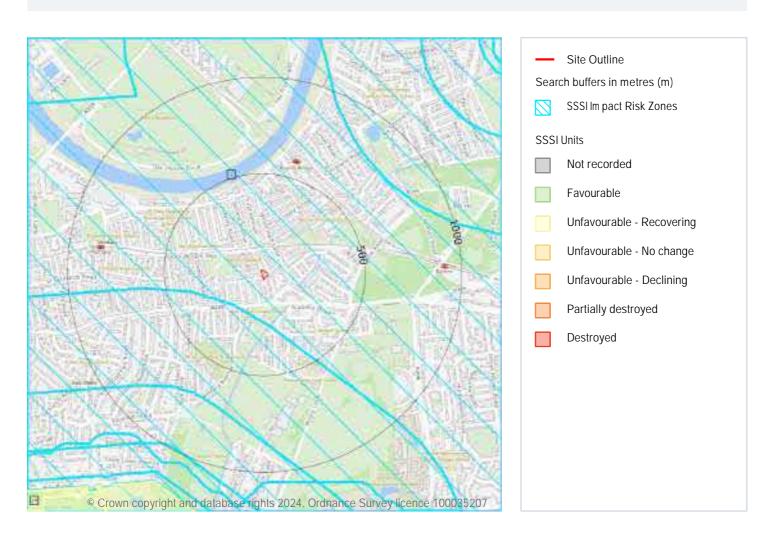
Location	Name	Туре	NVZ ID	Status
150m S	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes NVZ	Surface Water	455	Existing
569m NE	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes NVZ	Surface Water	455	Existing
622m NE	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes NVZ	Surface Water	455	Existing

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





SSSI Impact Zones and Units



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 62 >



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

ID	Location	Type of developments requiring consultation
1	On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could c ause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes > 20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gas ification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m 5

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.

Features are displayed on the SSSI Impact Zones and Units map on page 62 >

ID: 10

Location: 1192m S W SSSI name: Richmond P ark

Unit name: White Lodge Plantation To Sheen Cross Wood

Broad habitat: Acid Grassland - Lowland Condition: Unfavourable - Recovering

Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A211 heartwood decay	Favourable	27/10/2010
Invert. assemblage A212 bark and sapwood decay	Favourable	27/10/2010
Invert. assemblage A213 fungal fruiting body	Favourable	27/10/2010





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

Feature name	Feature condition	Date of assessment
Lowland dry acid grassland (U4/20)	Unfavourable - Recovering	27/10/2010
S1083 Stag beetle, Lucanus cervus	Favourable	27/10/2010

ID: 12

Location: 1373m S W
SSSI name: Richmond P ark
Unit name: Extensive Grassland
Broad habitat: Acid Grassland - Lowland
Condition: Unfavourable - Recovering

Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A211 heartwood decay	Favourable	27/10/2010
Invert. assemblage A212 bark and sapwood decay	Favourable	27/10/2010
Invert. assemblage A213 fungal fruiting body	Favourable	27/10/2010
Lowland dry acid grassland (U1b,c,d,f)	Unfavourable - Recovering	27/10/2010
Lowland dry acid grassland (U4/20)	Unfavourable - Recovering	27/10/2010
S1083 Stag beetle, Lucanus cervus	Favourable	27/10/2010

ID: 14

Location: 1410m S W
SSSI name: Richmond P ark
Unit name: Teck P lantation

Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland

Condition: Unfavourable - Recovering

Reportable features:

Feature name	Feature condition	Date of assessment
Lowland dry acid grassland (U4/20)	Favourable	01/10/2010
S1083 Stag beetle, Lucanus cervus	Unfavourable - Recovering	11/05/2010





Ref: GS-YTL-2SD-1Y5-4JZ **Your ref**: P16494 **Grid ref**: 521315 175626

ID:

Location: 1781m NE

SSSI name: Barn Elms Wetland Centre

Unit name: Whole Site

Broad habitat: Standing Open Water And Canals

Condition: Favourable

Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	25/10/2011
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	24/03/2022
Assemblages of breeding birds - Lowland open waters and their margins	Favourable	25/10/2011

ID:

Location: 1835m S W
SSSI name: Richmond P ark
Unit name: Pond S lade

Broad habitat: Acid Grassland - Lowland Condition: Unfavourable - Recovering

Reportable features:

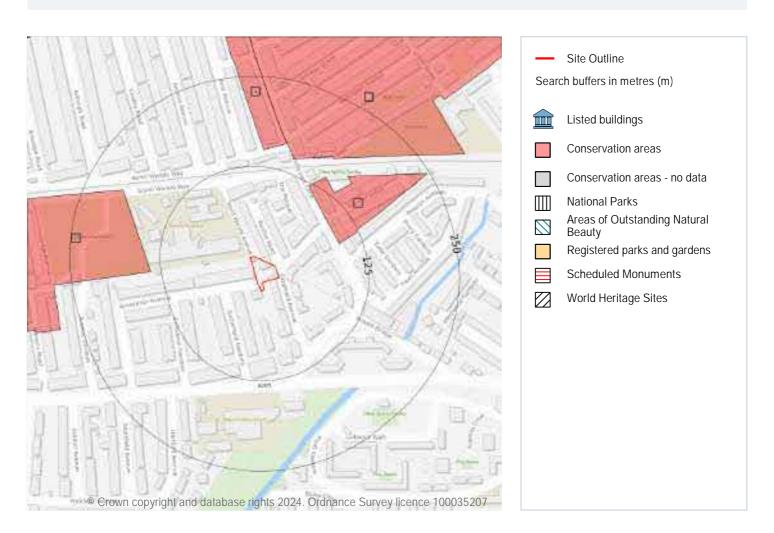
Feature name	Feature condition	Date of assessment
Invert. assemblage A211 heartwood decay	Favourable	27/10/2010
Invert. assemblage A212 bark and sapwood decay	Favourable	27/10/2010
Invert. assemblage A213 fungal fruiting body	Favourable	27/10/2010
Lowland dry acid grassland (U1b,c,d,f)	Unfavourable - Recovering	27/10/2010
Lowland dry acid grassland (U4/20)	Unfavourable - Recovering	27/10/2010
S1083 Stag beetle, Lucanus cervus	Favourable	27/10/2010

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





11 Visual and cultural designations



11.1 World Heritage Sites

Records within 250m

Sites designated for their globally important cultural or natural interest requiring appropriate r 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.



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

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 wellbeing 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 0

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.

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

11.5 Conservation Areas

Records within 250m

info@groundsure.com /

01273 257 755

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.



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Features are displayed on the Visual and cultural designations m ap on page 66 >

ID	Location	Name	District	Date of designation
1	93m NE	White Hart Lane	Richmond upon Thames	14/06/1988
2	140m W	Queen's Road (Mortlake)	Richmond upon Thames	07/09/1982
3	146m N	Thorne Passage	Richmond upon Thames	14/01/1969
4	149m N	Mortlake	Richmond upon Thames	07/09/1982

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

11.6 Scheduled Ancient Monum ents

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

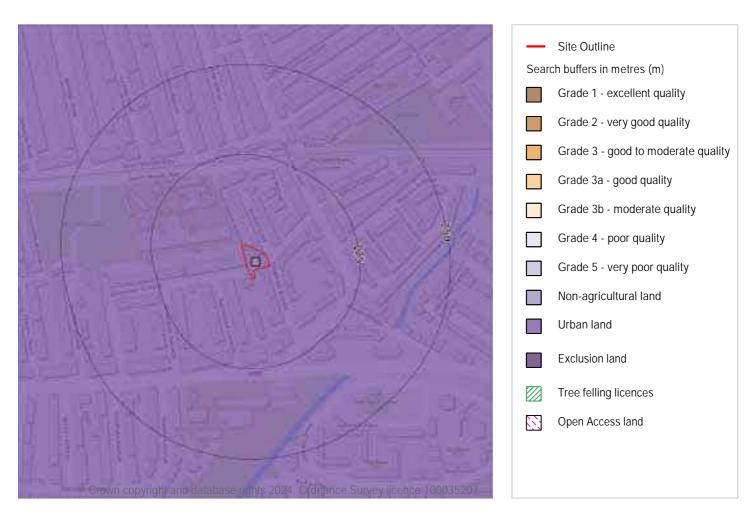
Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the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



12.1 Agricultural Land Classification

Records within 250m

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 69 >

ID	Location	Classification	Description
1	On site	Urban	-

This data is sourced from Natural England.



Ref: GS-YTL-2SD-1Y5-4JZ **Your ref**: P16494 **Grid ref**: 521315 175626

12.2 Open Access Land

Records within 250m

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 tree 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

13.1 Priority Habitat Inventory

Records within 250m 0

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

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 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

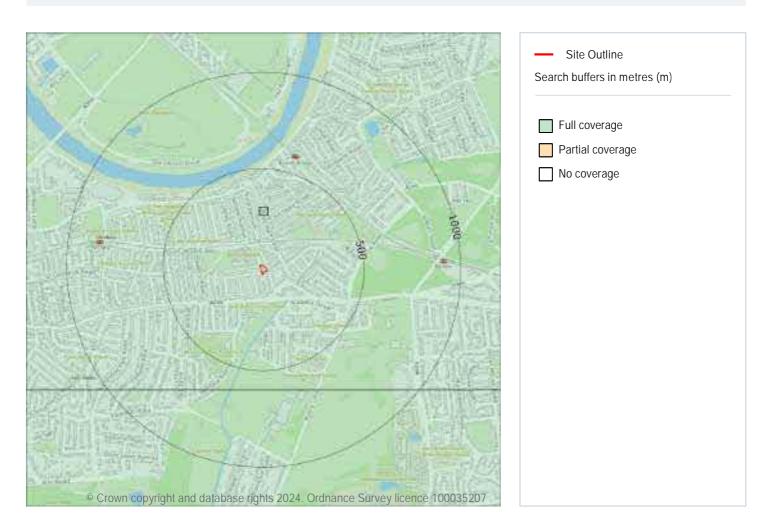
Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened 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



14.1 10k Availability

Records within 500m

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 72 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	TQ27NW

This data is sourced from the British Geological Survey.





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

14.2 Artificial and made ground (10k)

Records within 500m

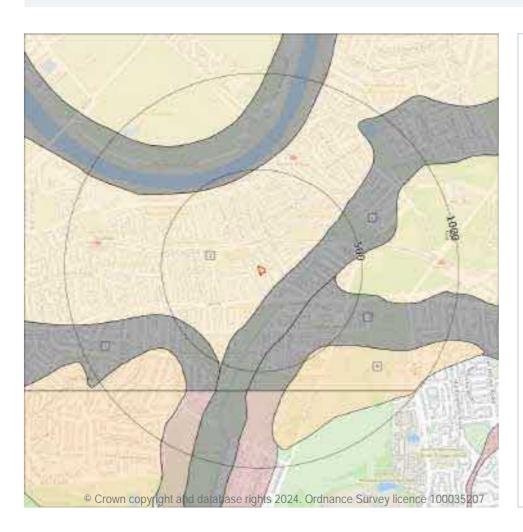
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.





Geology 1:10,000 scale - Superficial



Site OutlineSearch buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on page 74 >

ID	Location	LEX Code	Description Rock description	
1	On site	KPGR-XSV	Kempton Park Gravel Formation - Sand And Gravel	Sand And Gravel
2	88m SE	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt
3	270m SE	HEAD-C	Head - Clay (unlithified Deposits Coding Scheme)	Clay
4	365m E	KPGR-XSV	Kempton Park Gravel Formation - Sand And Gravel	Sand And Gravel





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ID	Location	LEX Code	Description	Rock description
5	437m SW	HEAD-C	Head - Clay (unlithified Deposits Coding Scheme)	Clay
6	479m SE	TPGR-XSV	Taplow Gravel Formation - Sand And Gravel	Sand And Gravel

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 OutlineSearch 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

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 76 >

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.



Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

14.6 Bedrock faults and other linear features (10k)

Records within 500m

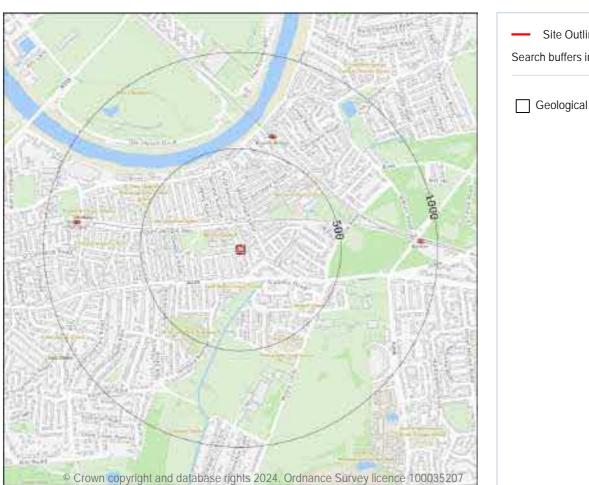
Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.





15 Geology 1:50,000 scale - Availability



Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m

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 78 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW270_south_london_v4

This data is sourced from the British Geological Survey.





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

15.2 Artificial and made ground (50k)

Records within 500m

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m 0

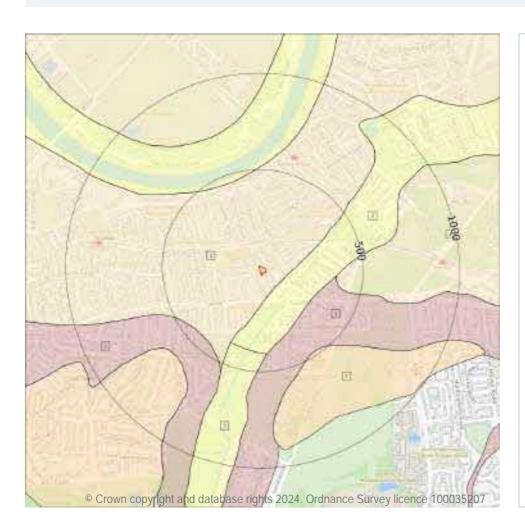
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





Geology 1:50,000 scale - Superficial



Site OutlineSearch buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m 7

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on page 80 >

ID	Location	LEX Code	Description	Rock description
1	On site	KPGR-XSV	KEMPTON PARK GRAVEL MEMBER	SAND AND GRAVEL
2	88m SE	A LV-XC ZSP	ALLUVIUM	CLAY, SILT, SANDAND PEAT
3	271m SE	HEAD- XCZSV	HEAD	CLAY, SILT, SANDAND GRAVEL



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ID	Location	LEX Code	Description	Rock description
4	364m E	KPGR-XSV	KEMPTON PARK GRAVEL MEMBER	SAND AND GRAVEL
5	384m SW	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
6	437m SW	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	479m SE	TPGR-XSV	TAPLOW GRAVEL MEMBER	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial perm eability (50k)

Records within 50m

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).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Very High	High

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

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.

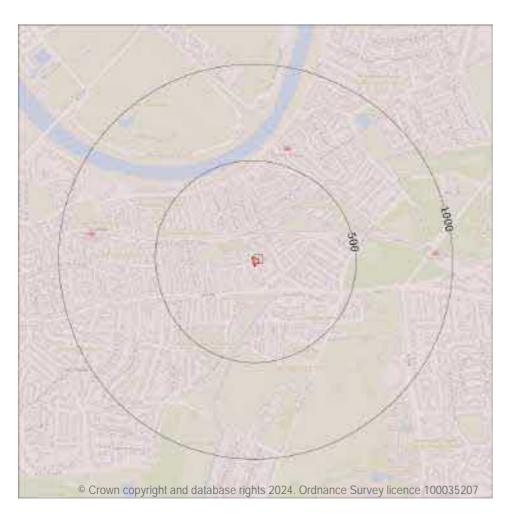


Date: 24 February 2024

1



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

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 82 >

ID	Location	LEX Code	Description	Rock age
1	On site	LC-XCZ	LONDON CLAY FORMATION - CLAY AND SILT	YPRESIAN

This data is sourced from the British Geological Survey.





1

15.9 Bedrock permeability (50k)

Records within 50m

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	Low	Very Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m 0

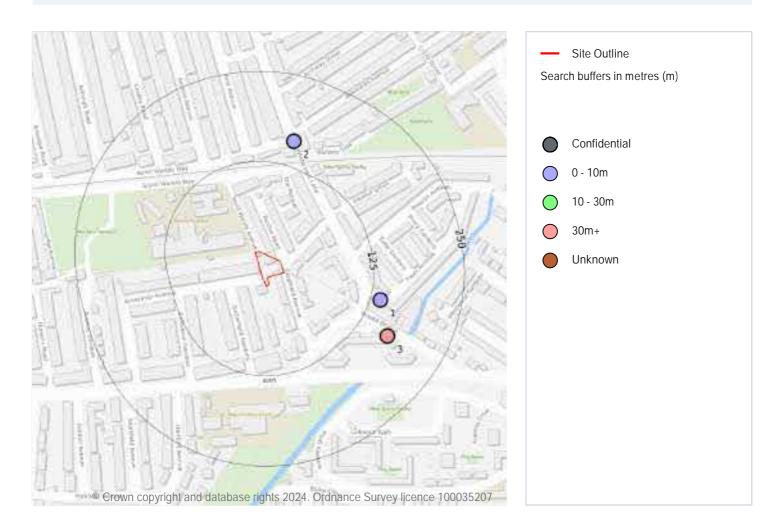
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.





16 Boreholes



16.1 BGS Boreholes

Records within 250m

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, st 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 84 >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	139m E	521470 175580	SITED LONDON ATLAS G14 MORTLAKE	5.18	Ν	<u>586584</u> /
2	160m N	521350 175800	SITED LONDON ATLAS G15 MORTLAKE	6.4	Ν	<u>586585</u> ↑
3	168m SE	521480 175530	METROPOLITAN WB BARNES 68	45.72	Ν	<u>587018</u> ↑





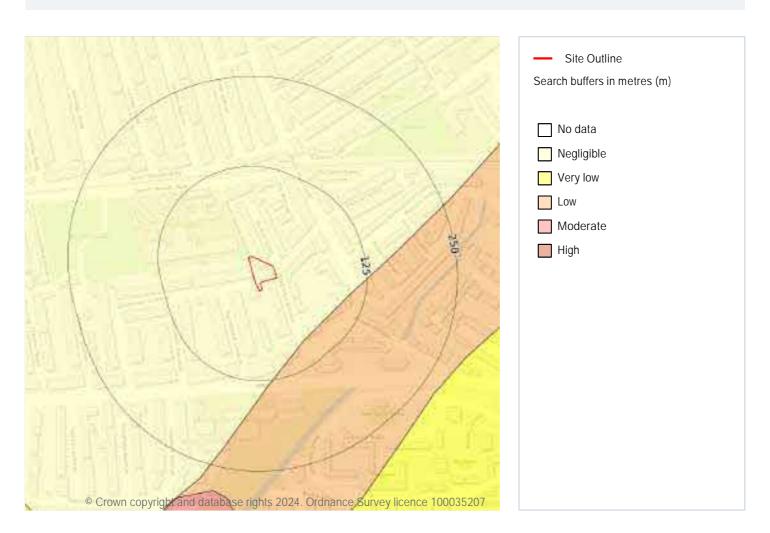
Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

This data is sourced from the British Geological Survey.





17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

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 86 >

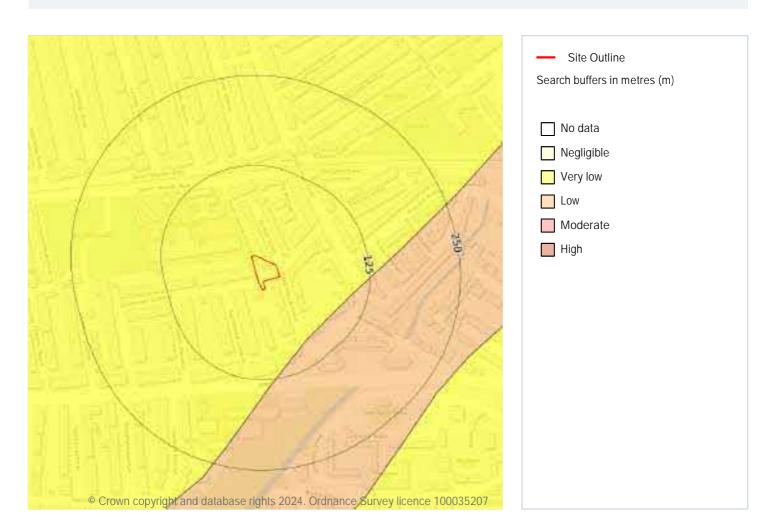
Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

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 87 >

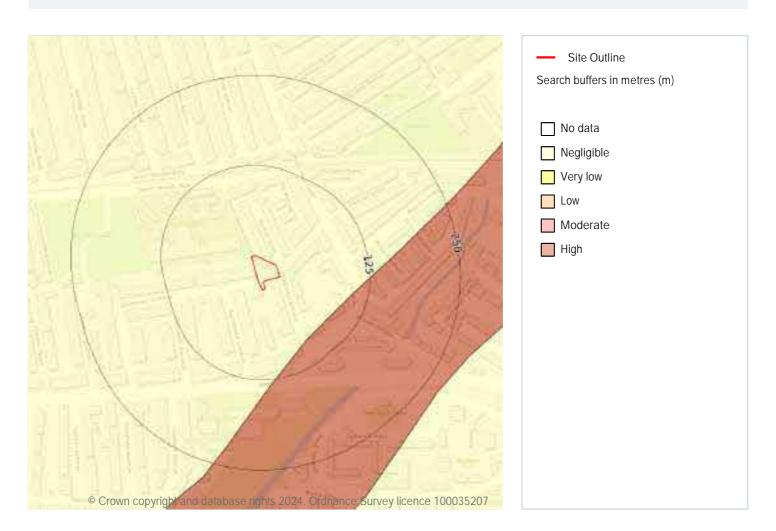
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

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 88 >

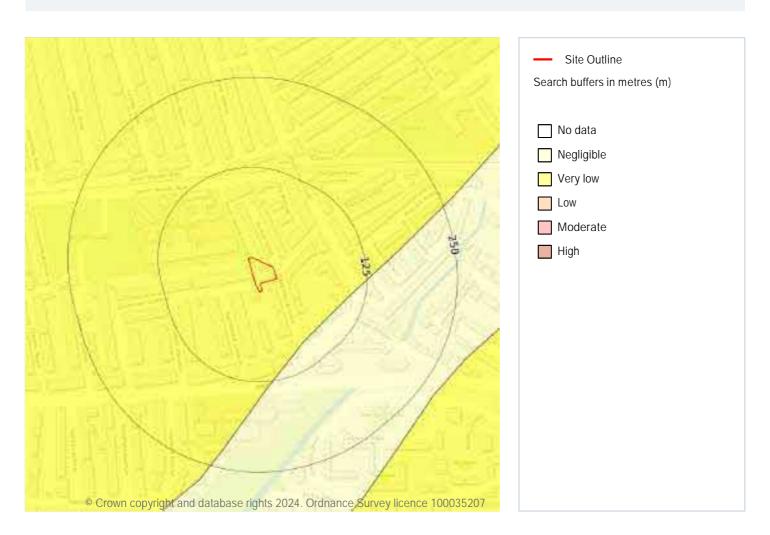
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

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 89 >

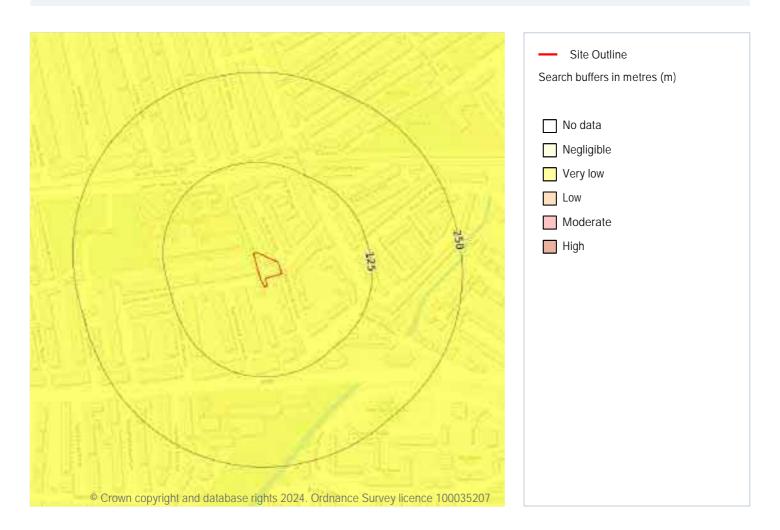
Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m

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 90 >

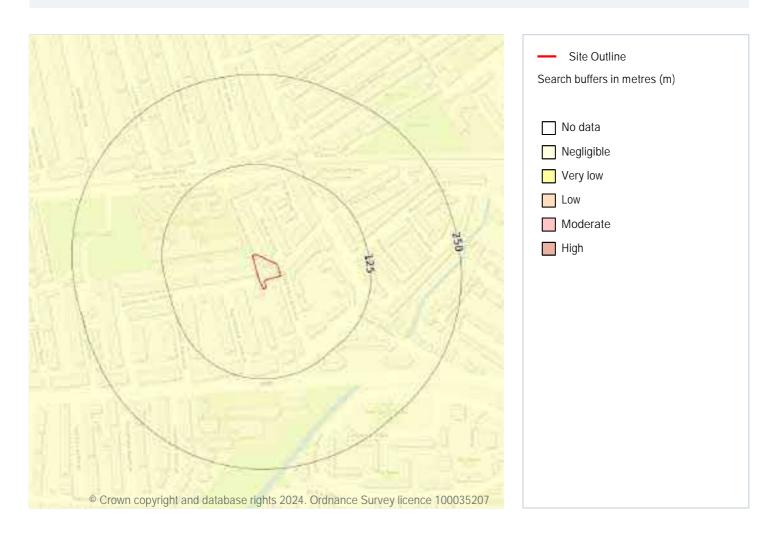
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

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 91

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.



Contact us with any questions at:



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This data is sourced from the British Geological Survey.





18 Mining and ground workings





18.1 BritPits

Records within 500m

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.





18.2 Surface ground workings

Records within 250m

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

Features are displayed on the Mining and ground workings map on page 93 >

ID	Location	Land Use	Year of mapping	Mapping scale
А	139m W	Cemetery	1866	1:10560
Α	140m W	Cemetery	1898	1:10560
Α	141m W	Cemetery	1893	1:10560
Α	142m W	Cemetery	1933	1:10560
А	142m W	Cemetery	1962	1:10560
Α	143m W	Cemetery	1987	1:10000
Α	143m W	Cemetery	1974	1:10000
А	143m W	Cemetery	1967	1:10560
Α	143m W	Cemetery	1911	1:10560
А	144m W	Cemetery	1947	1:10560
А	144m W	Cemetery	1958	1:10560
Α	146m W	Cemetery	1933	1:10560
А	146m W	Cemetery	1910	1:10560
Α	146m W	Cemetery	1894	1:10560
Α	148m W	Cemetery	1920	1:10560
А	148m W	Cemetery	1938	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m 0

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

This is data is sourced from Ordnance Survey/Groundsure.



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18.4 Underground mining extents

Records within 500m

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

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

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 JPB m ining 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.

18.8 The Coal Authority non-coal mining

Records within 500m 0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the



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Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m 0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m 0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m 0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site 0

01273 257 755

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

This data is sourced from the Coal Authority.



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18.13 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.

18.14 Gypsum areas

Records on site 0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site 0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 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 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

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.

19.2 Mining cavities

Records within 1000m

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.

19.3 Reported recent incidents

Records within 500m

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.





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This data is sourced from Groundsure.

19.5 National karst database

Records within 500m

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

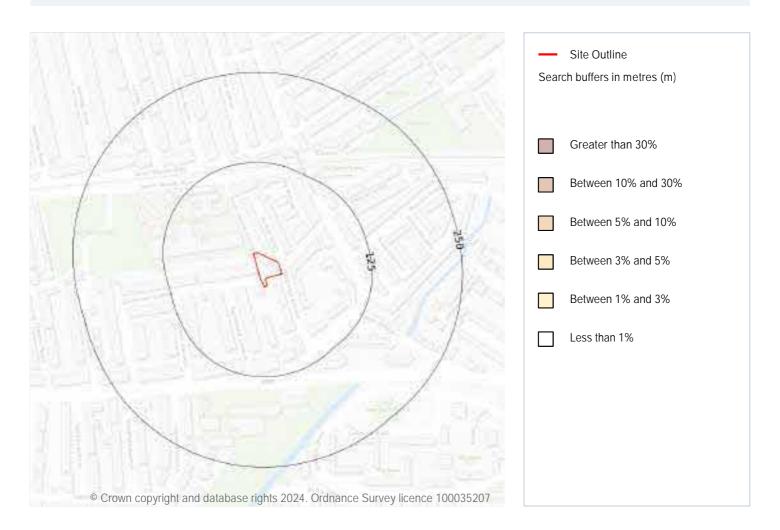
The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.





20 Radon



20.1 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 100 >

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





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





1

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

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 km². 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 km²; 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.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

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 km²).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromiu m (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/k g)
On site	19	3.3	289	199	1	65	73	25	32
On site	21	3.7	352	242	1.3	68	89	27	40
On site	22	3.8	411	282	1.6	74	107	29	47
11m SW	20	3.5	340	234	1.3	68	85	27	37

This data is sourced from the British Geological Survey.





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

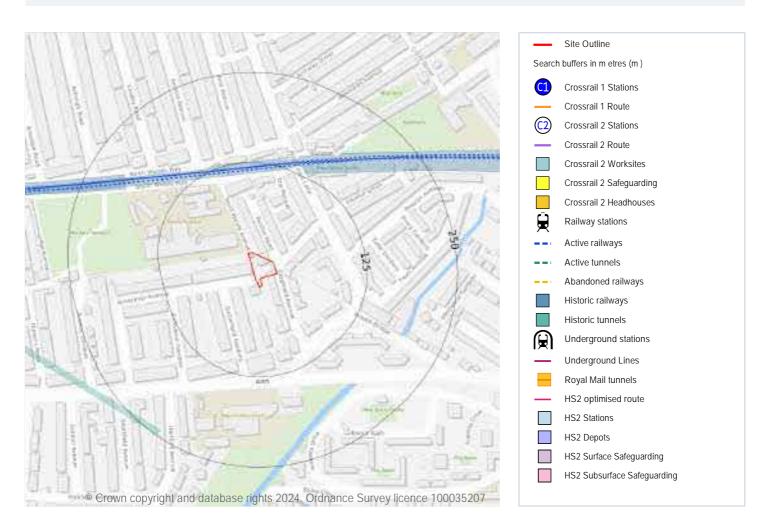
The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.





22 Railway infrastructure and projects



22.1 Underground railways (London)

Records within 250m 0

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

This data is sourced from publicly available information by Groundsure.

22.2 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.



Ref: GS-YTL-2SD-1Y5-4JZ **Your ref**: P16494 **Grid ref**: 521315 175626

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m 0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m

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 104 >

Location	Land Use	Year of mapping	Mapping scale
109m N	Railways	1919	-
192m NW	Railways	1898	-
241m SW	Tunnel	1916	2500

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m

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.

22.6 Historical railways

Records within 250m 0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways an lines.

This data is sourced from OpenStreetMap.



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22.7 Railways

Records within 250m

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 104 >

Location	Name	Туре
114m N	Waterloo to Reading Line	rail
118m N	Not given	Multi Track
118m N	Waterloo to Reading Line	rail
236m NE	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 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.

22.9 Crossrail 2

Records within 500m

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.

22.10 HS2

Records within 500m 0

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

This data is sourced from HS2 ltd.





Ref: GS-YTL-2SD-1Y5-4JZ Your ref: P16494 Grid ref: 521315 175626

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 \nearrow .

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: $\underline{www.groundsure.com/terms-and-conditions-april-2023/}$ \nearrow .





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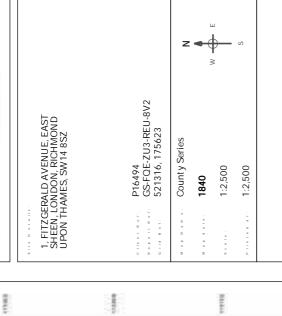
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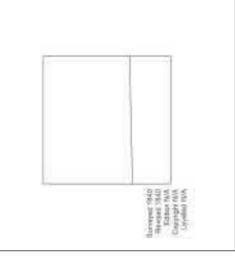
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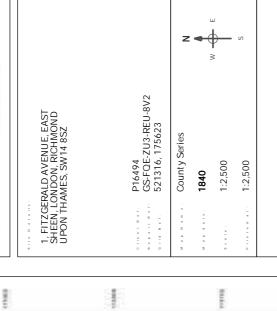
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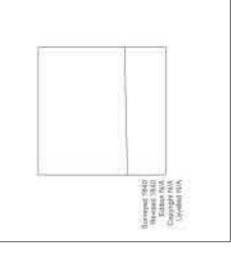
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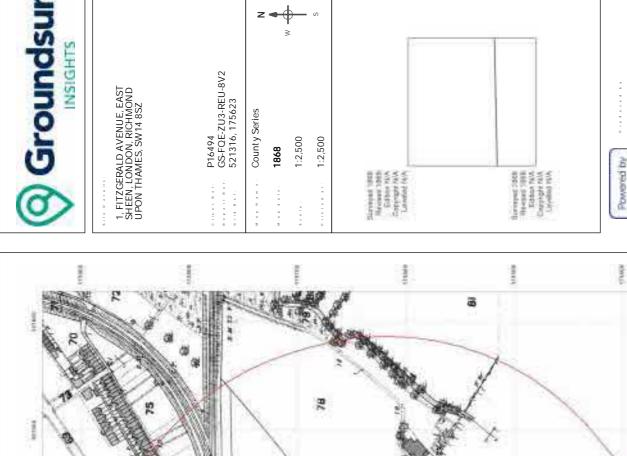
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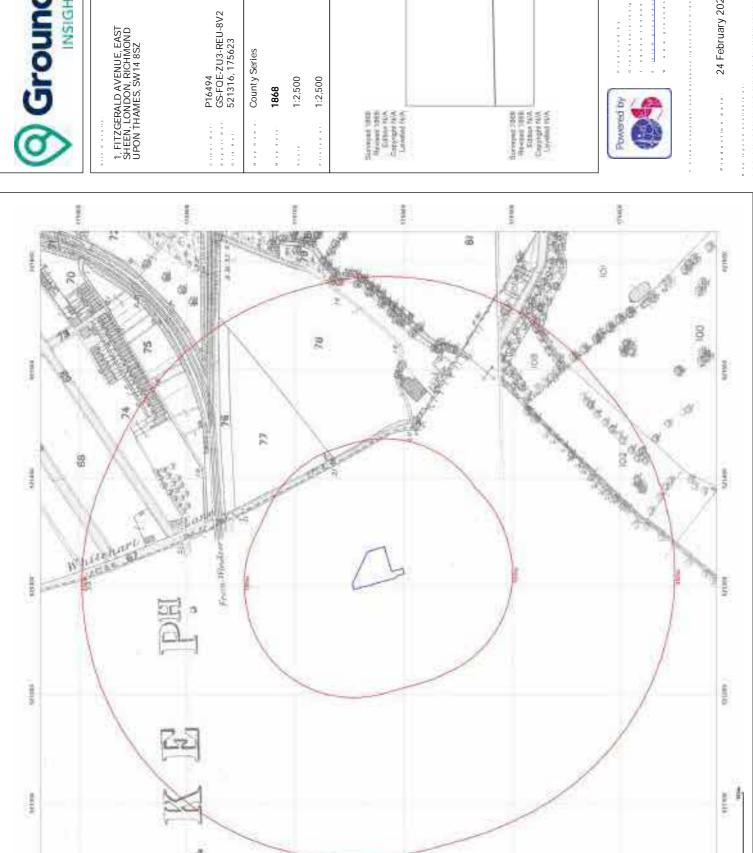
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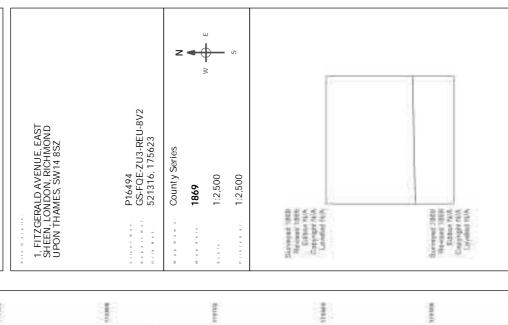
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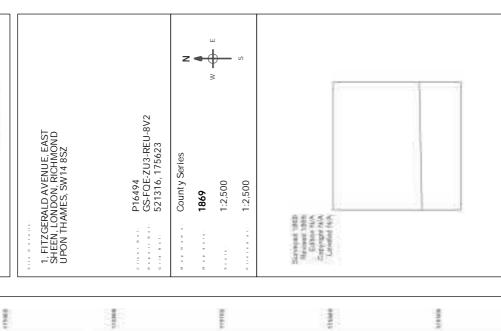
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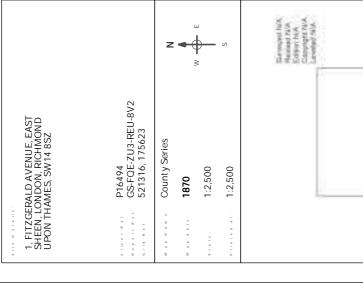
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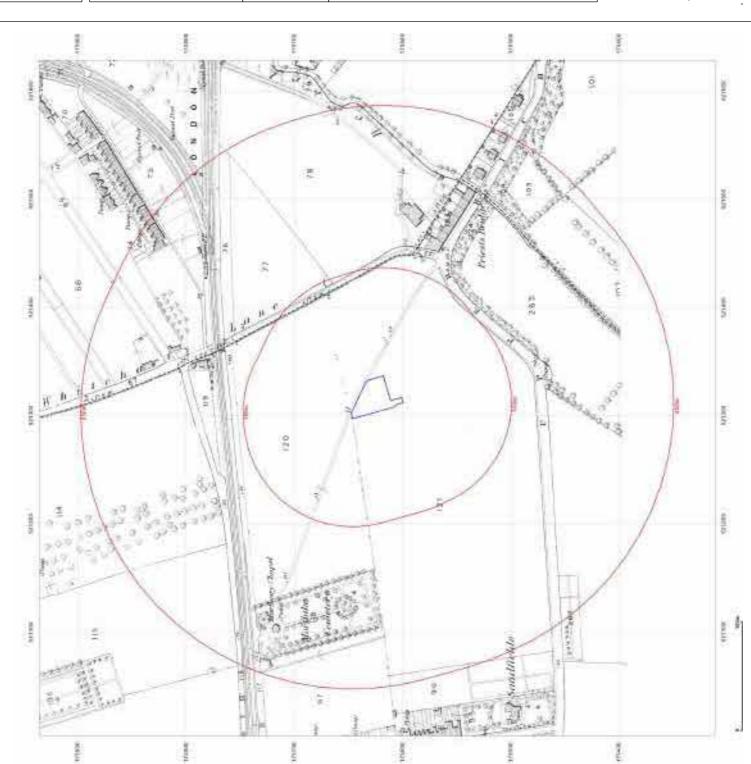
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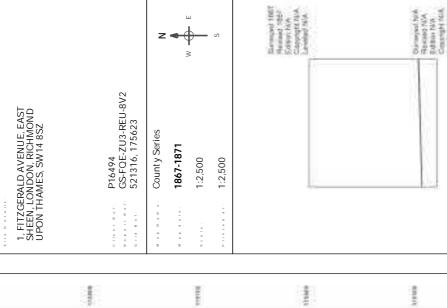
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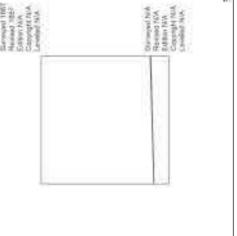
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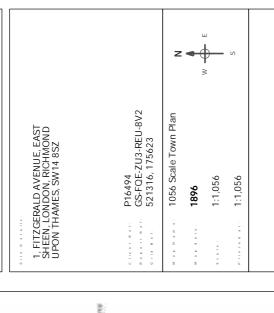
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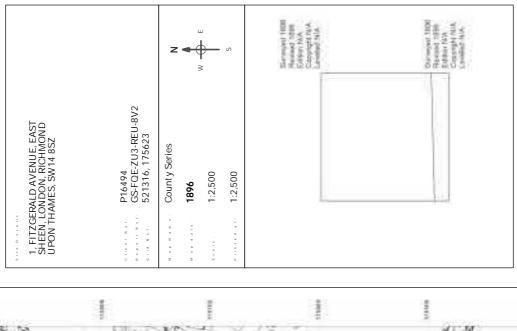
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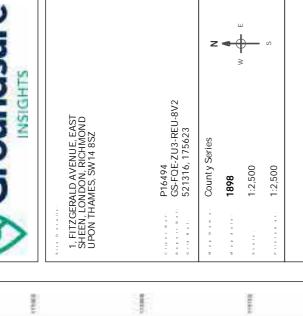
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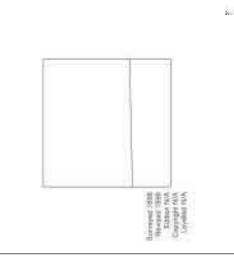
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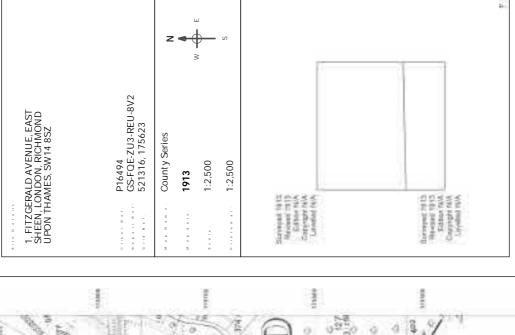
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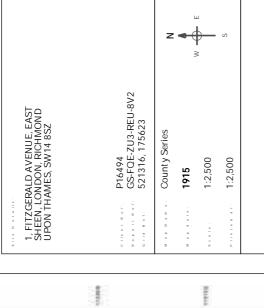
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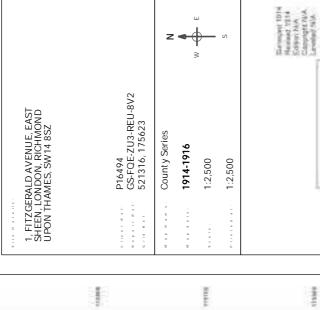
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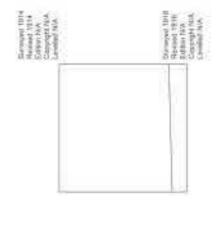
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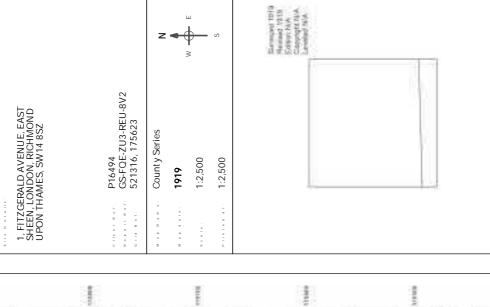
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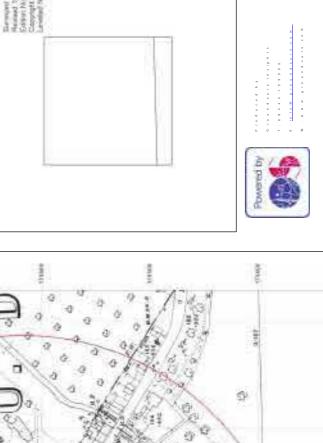


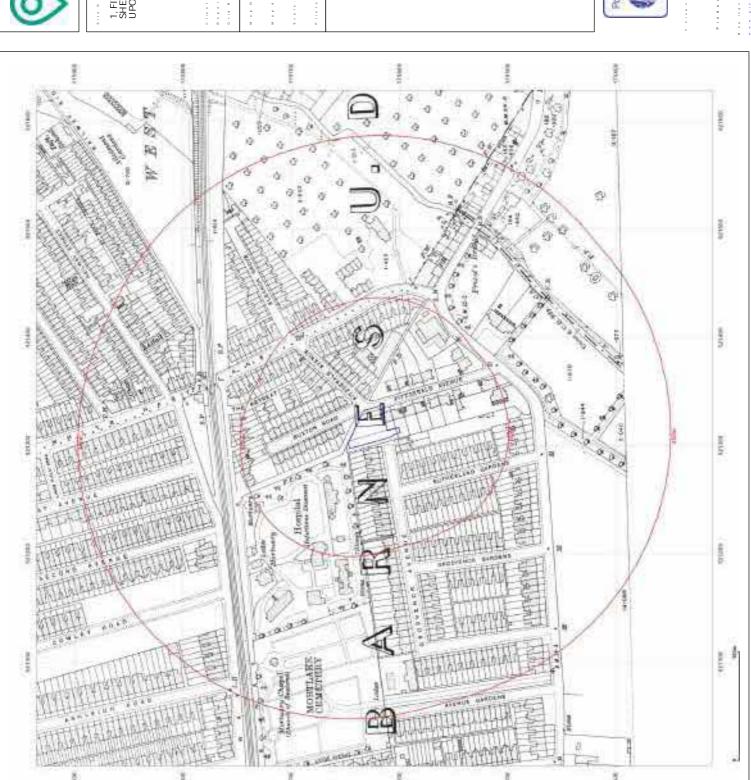
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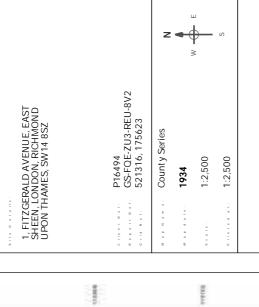
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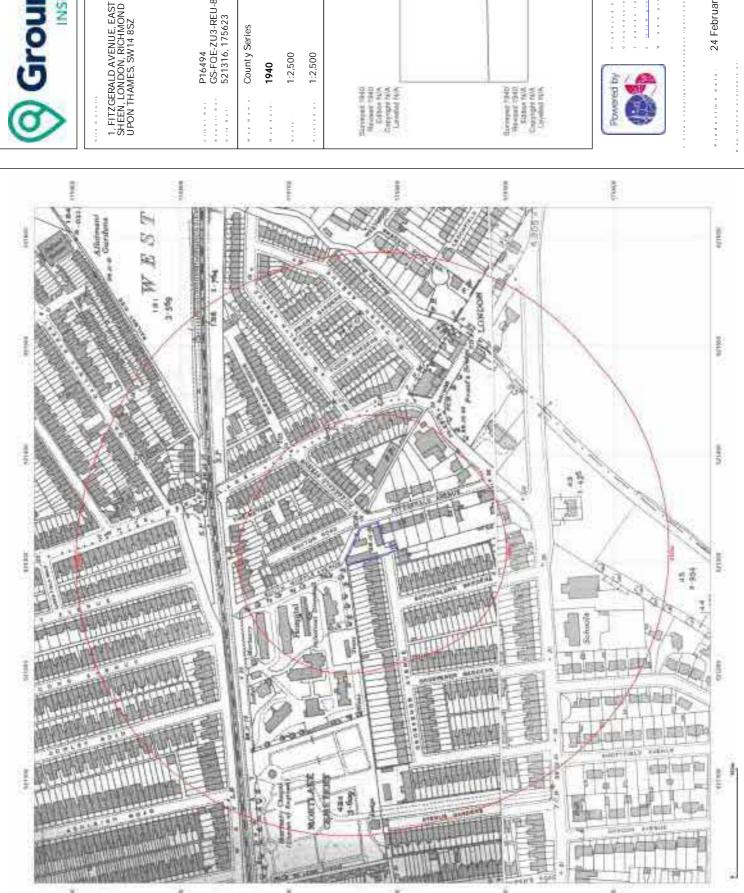


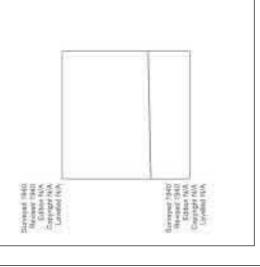
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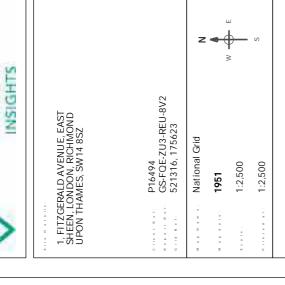
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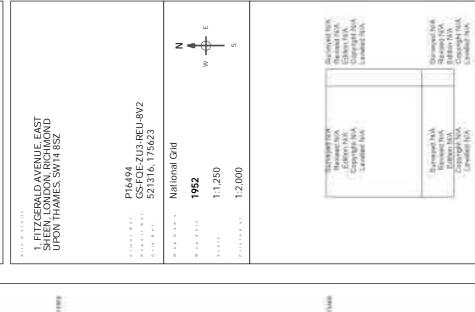














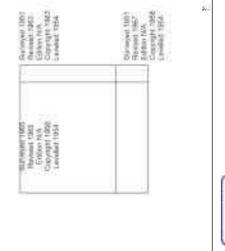




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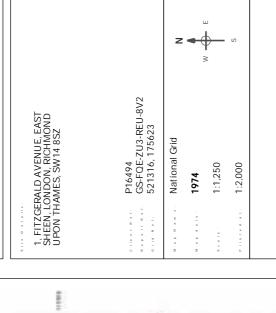


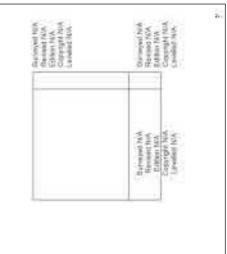
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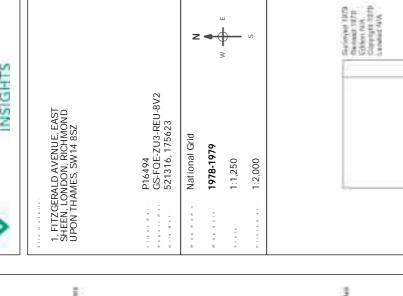


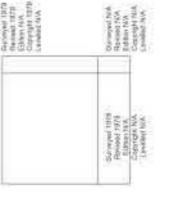
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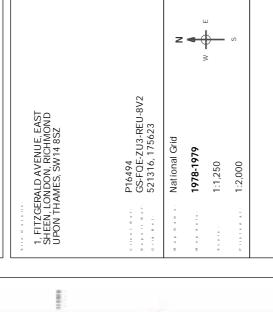


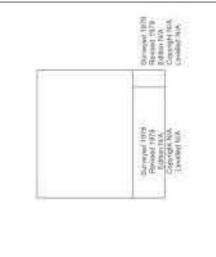
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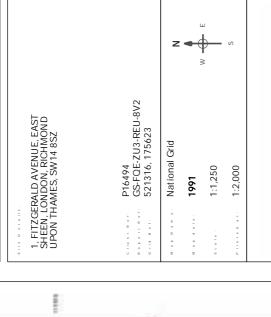
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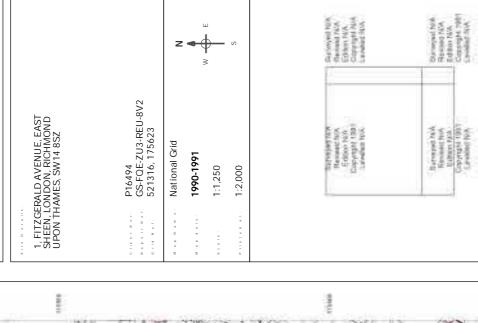
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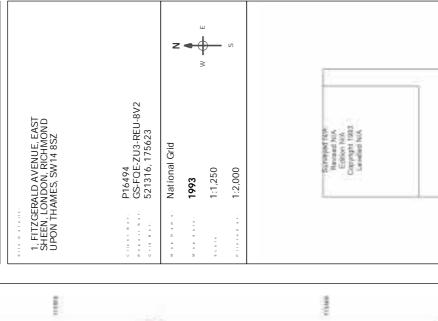






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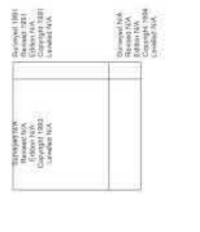




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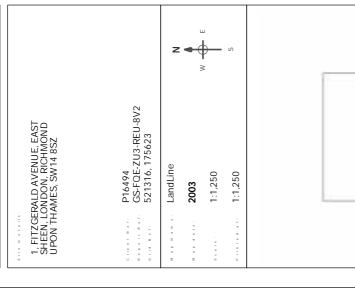


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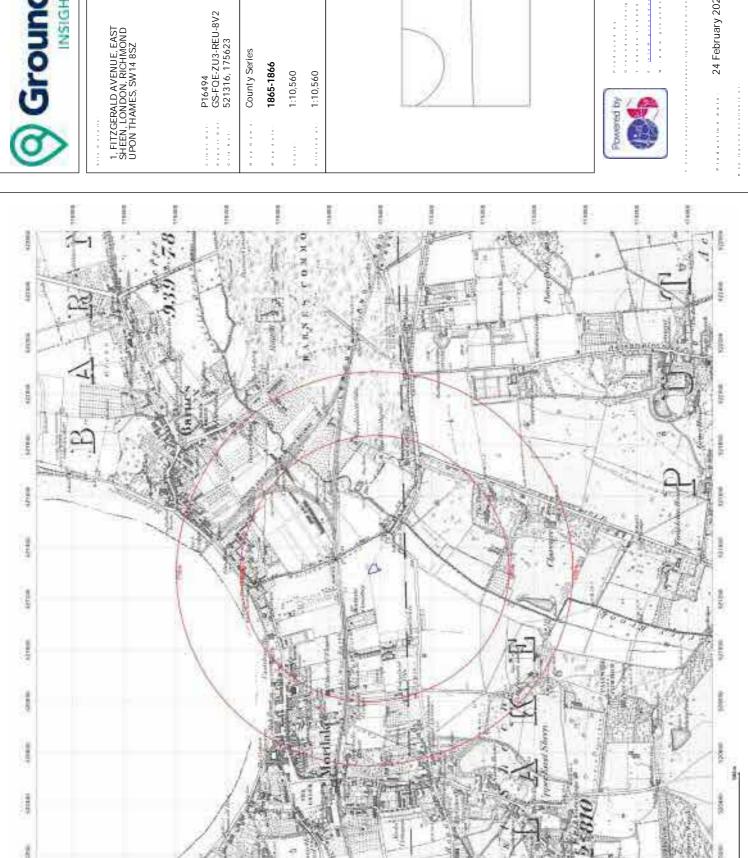


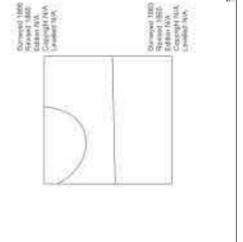
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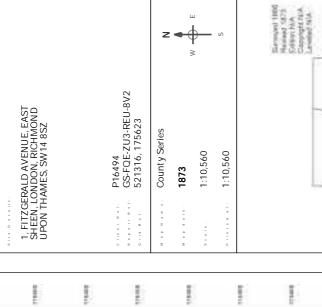
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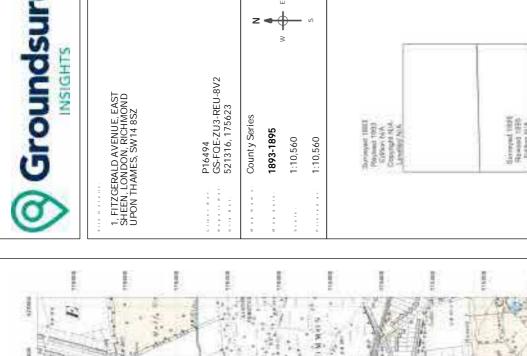
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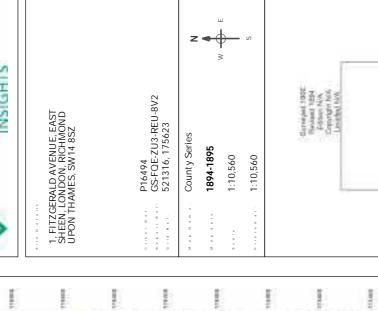
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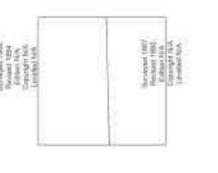
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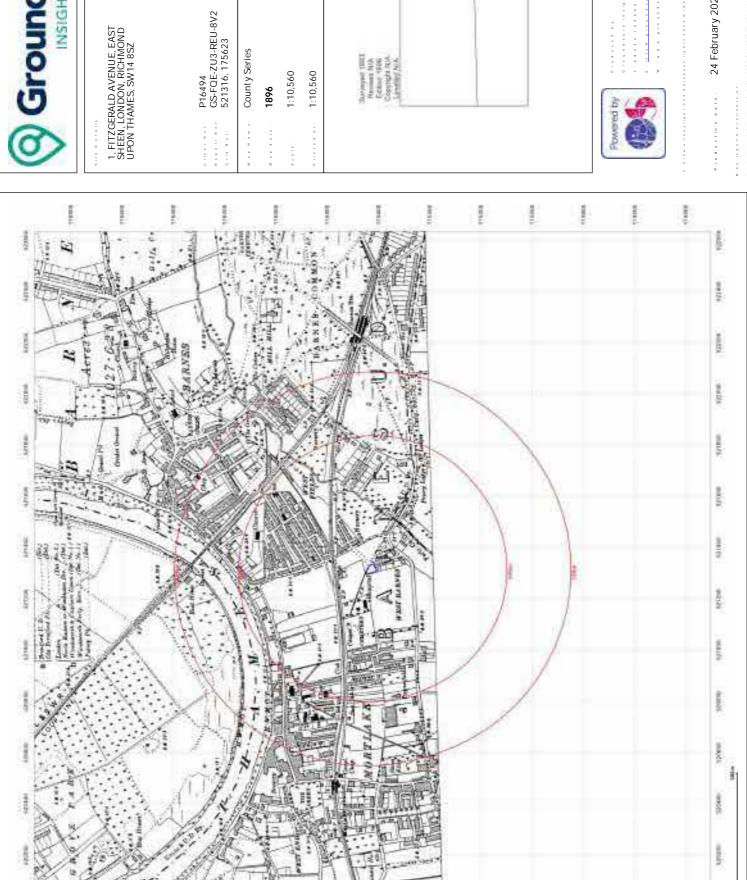












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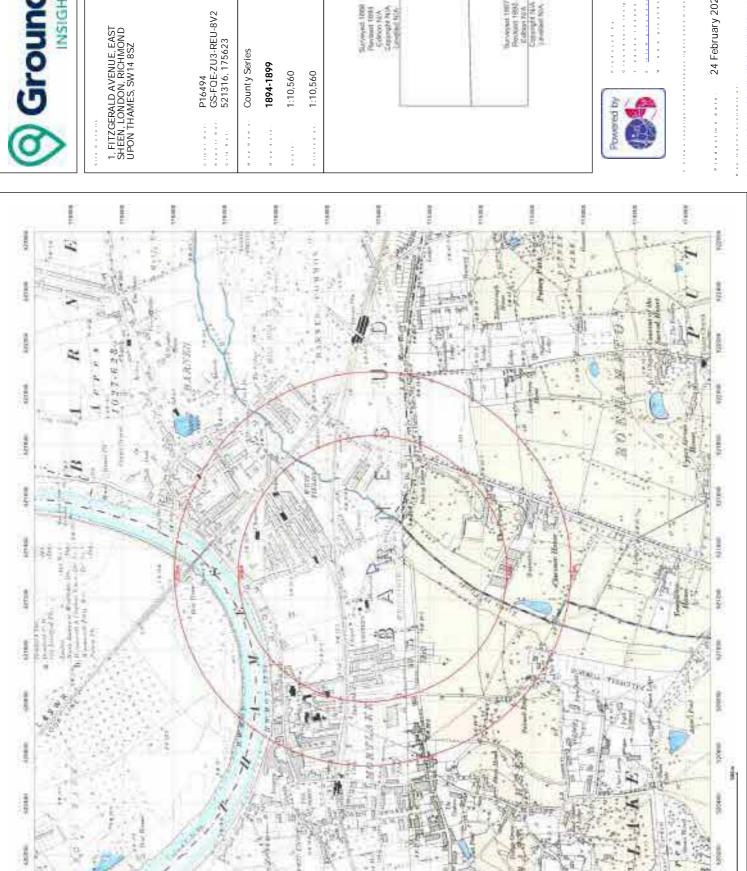
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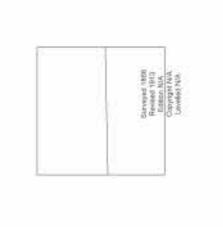
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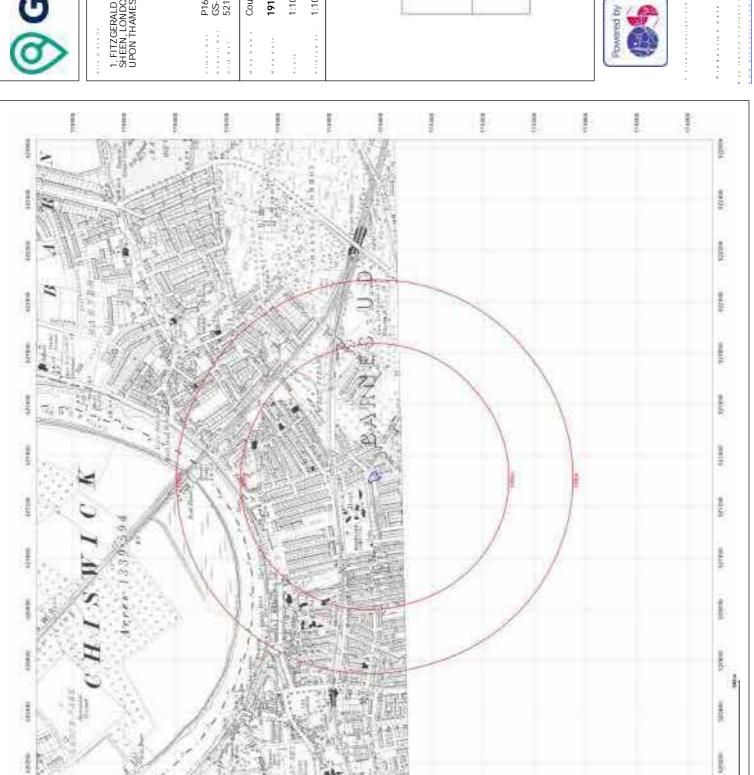
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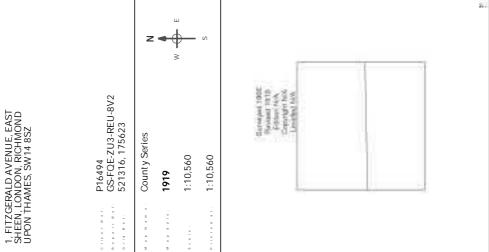
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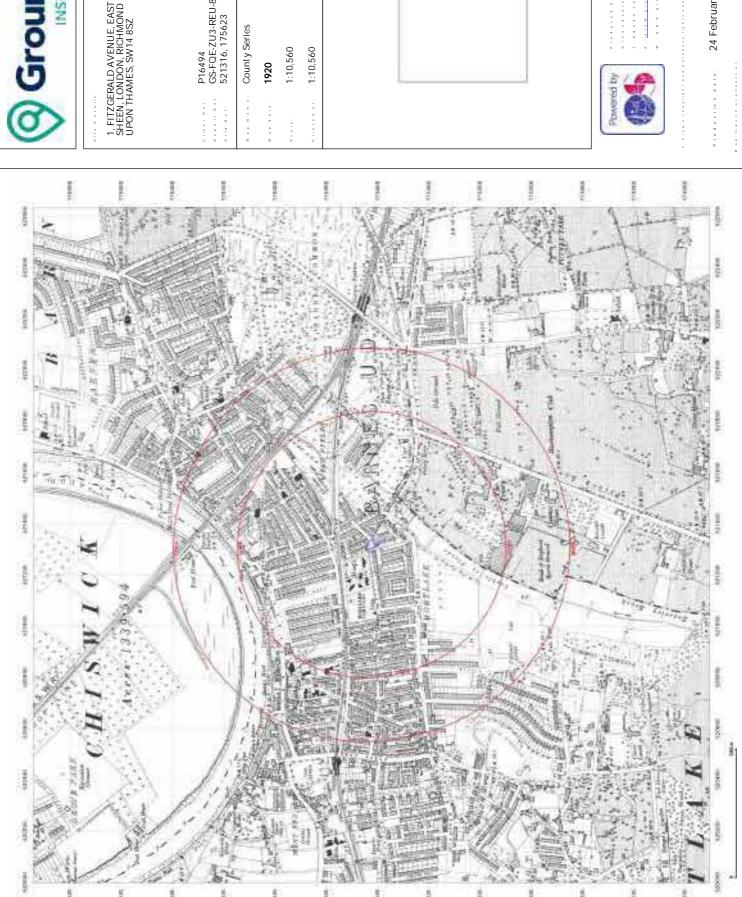


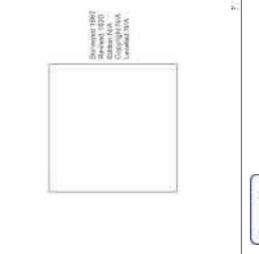


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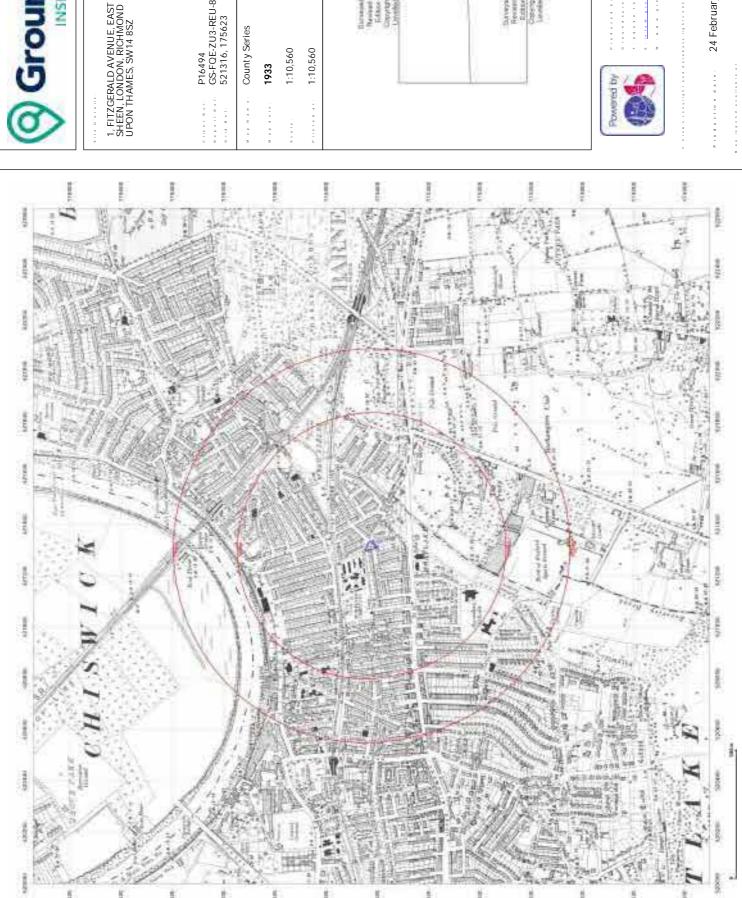


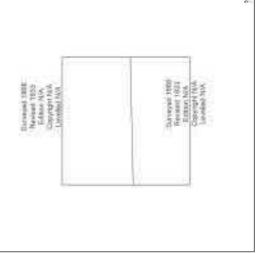


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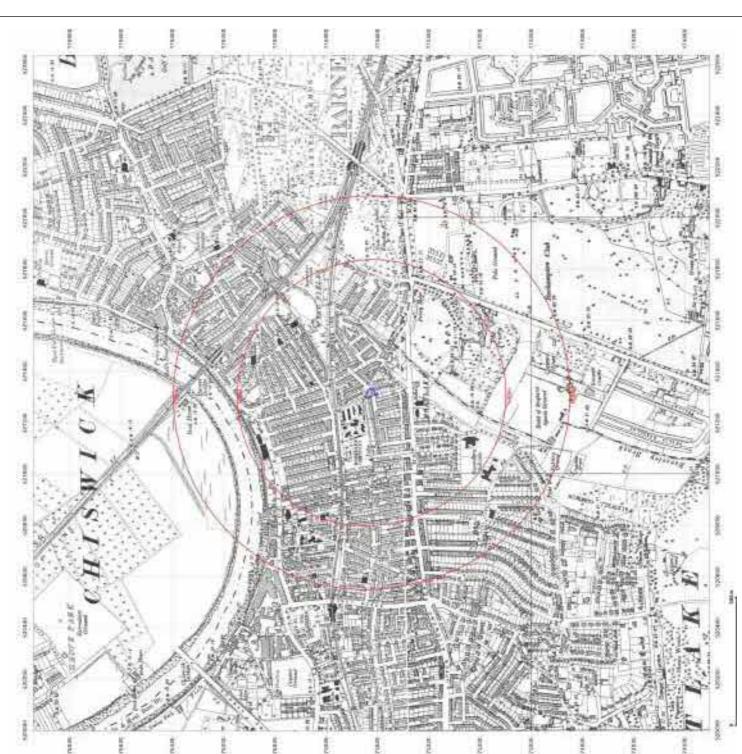
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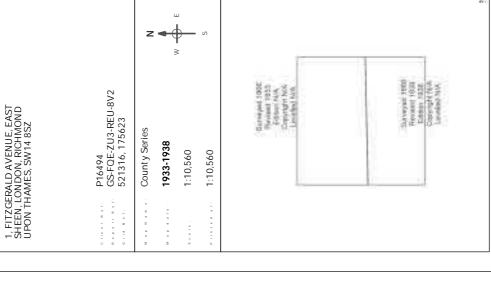














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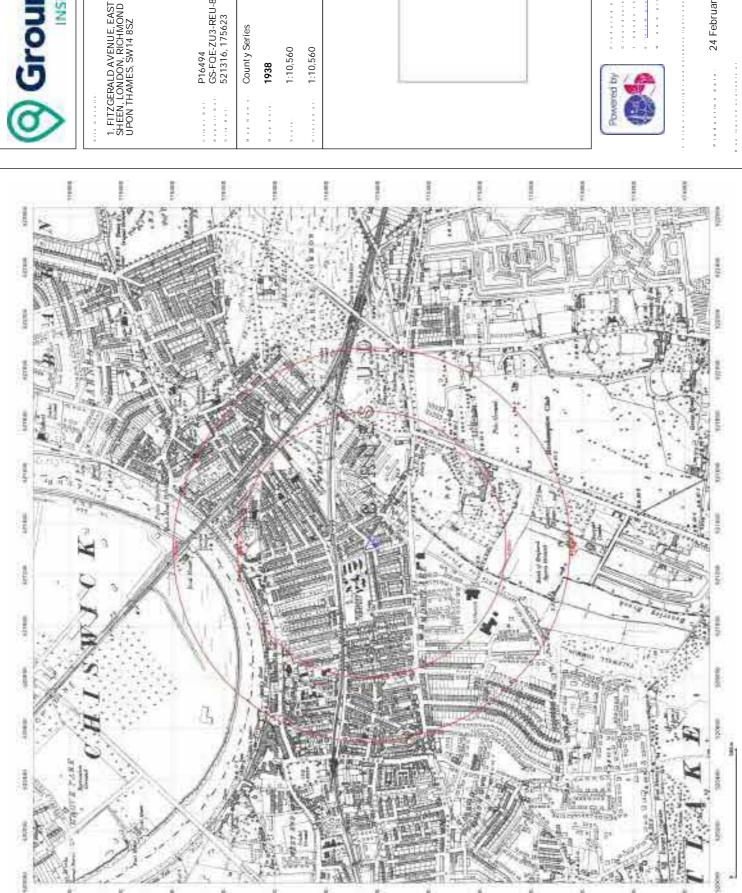




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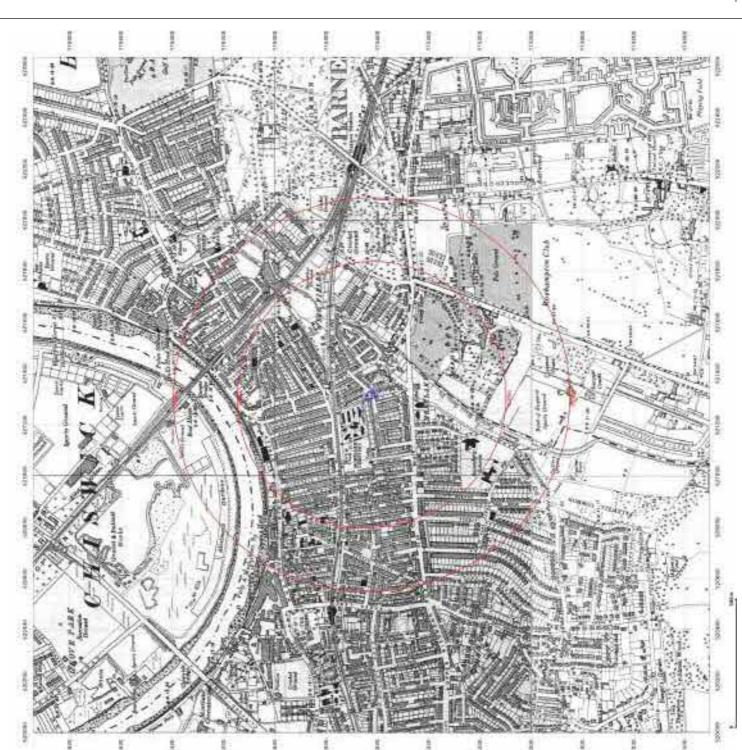
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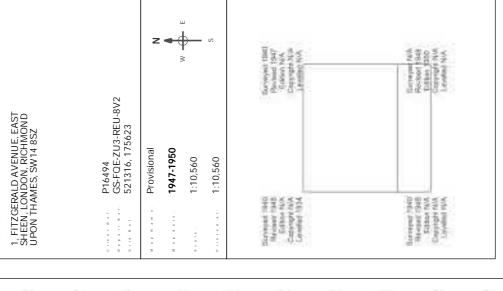






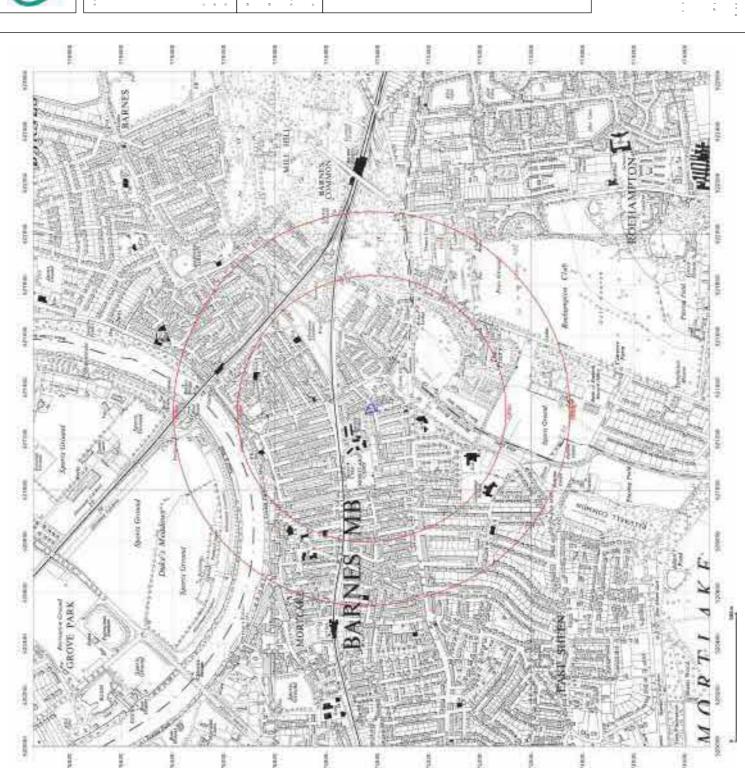


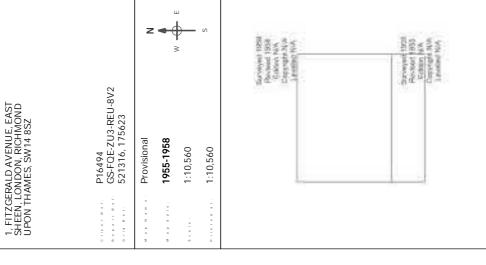






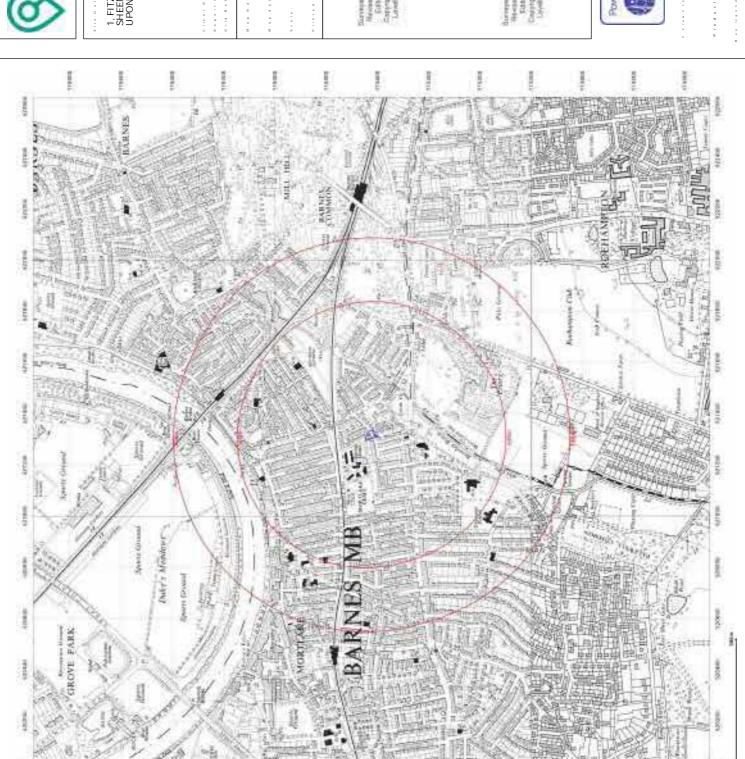


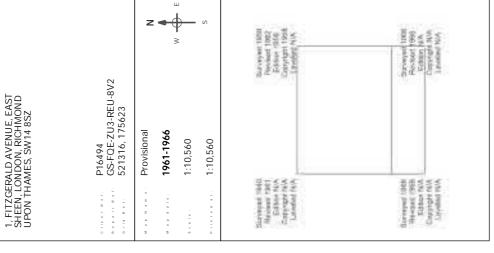










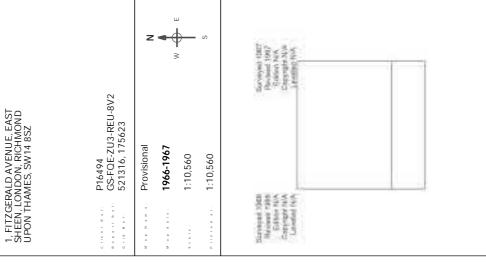






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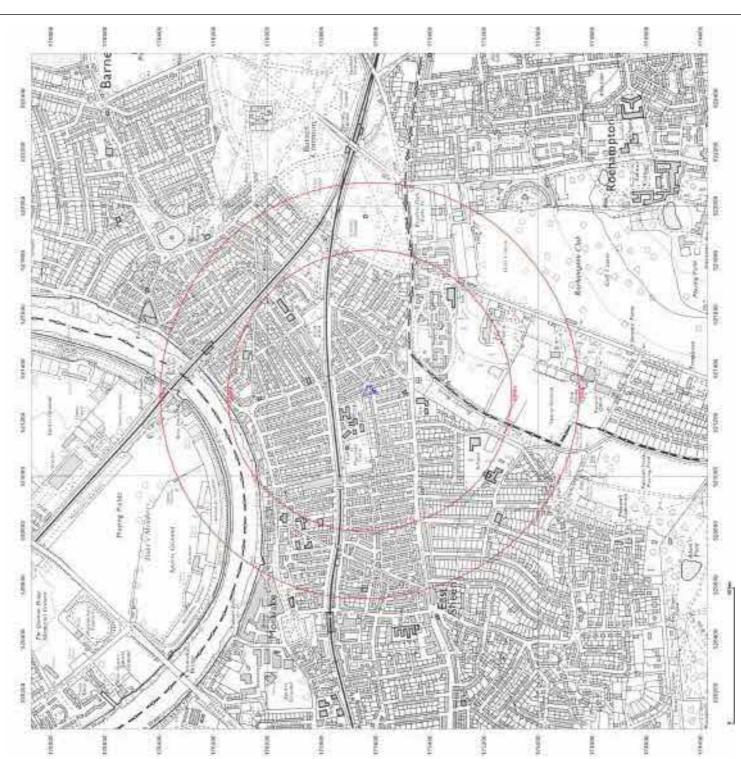


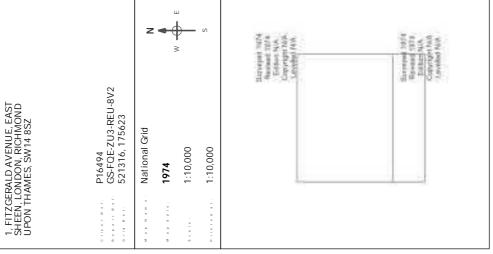
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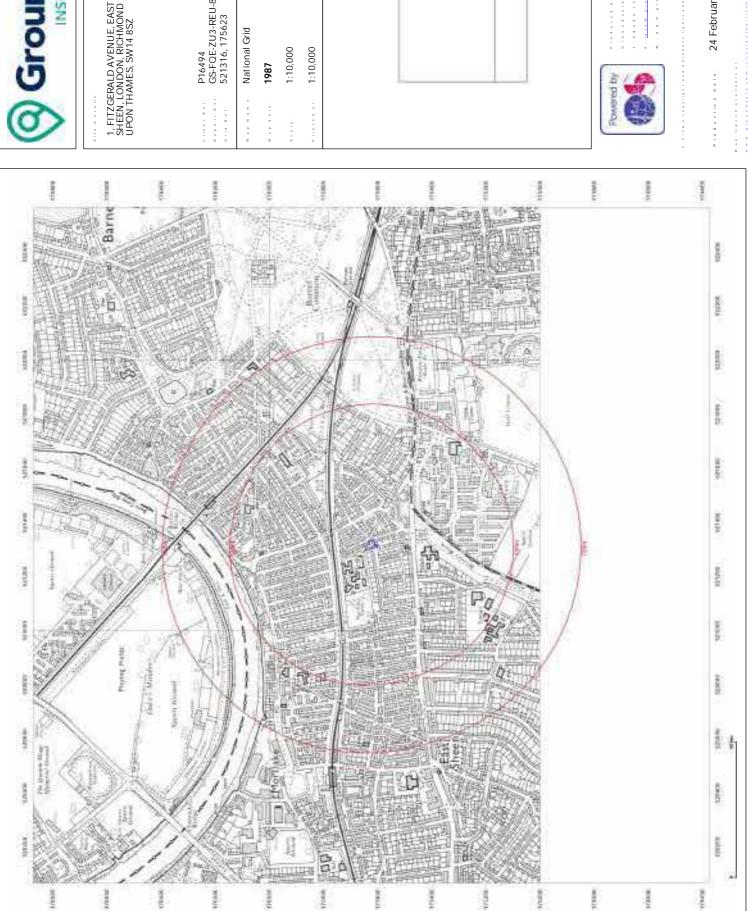


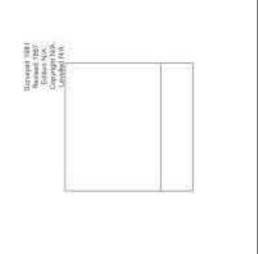


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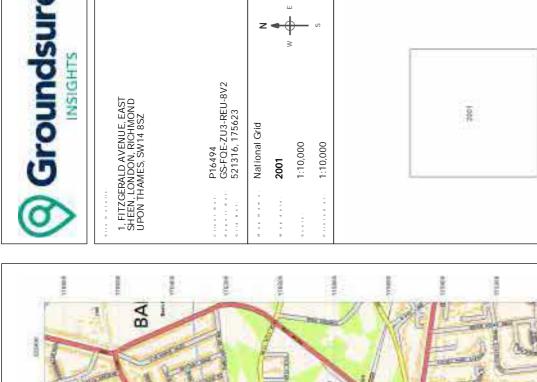




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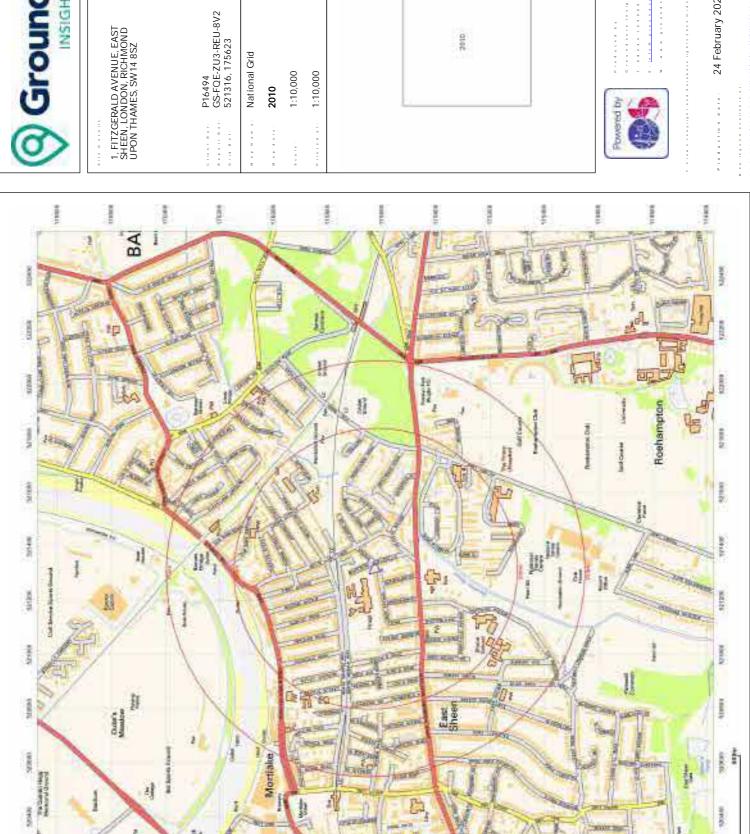
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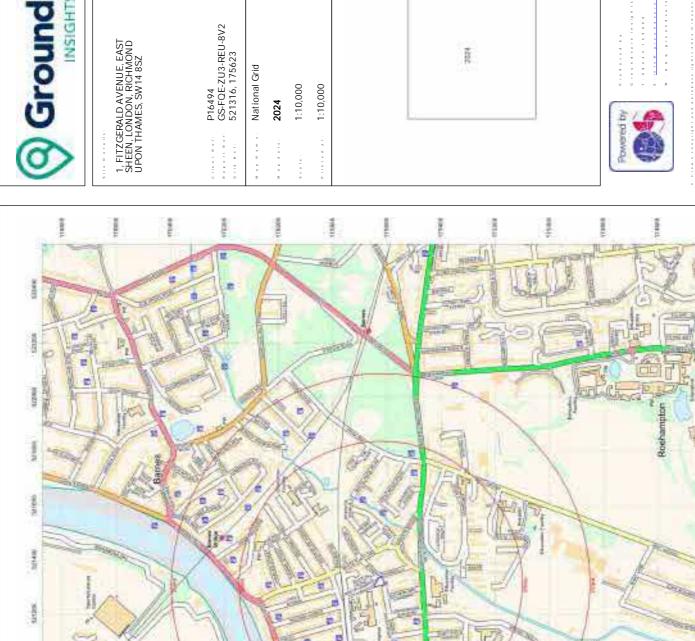
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