

## Screening and Scoping study: Groundwater Basement Flat, 143 Gloucester Avenue, NW1 8LA

Prepared for: Ground and Water Limited

15 Bow Street

**Alton** 

Hampshire GU34 1NY

Date: 20/05/2016 Status: Final

Reference: 30143R1

© H Fraser Consulting Ltd 2016

Prepared by: H Fraser Consulting Ltd





Copyright of this Report is vested in H Fraser Consulting Ltd and no part of it may be copied or reproduced by any means without prior written permission from H Fraser Consulting Ltd. If you have received this Report in error, please destroy all copies in your possession and control and notify H Fraser Consulting Ltd.

This report has been prepared by H Fraser Consulting Ltd, with reasonable skill, care and diligence within the agreed scope and terms of contract and taking account of the manpower and resources devoted to it by agreement with its client, and is provided by H Fraser Consulting Ltd solely for the use of its client.

The advice and opinions in this report should be read and relied on only in the context of the report as a whole, taking account of the terms of reference agreed with the client. The findings are based on the information made available to H Fraser Consulting at the date of the report (and will have been assumed to be correct) and on current UK standards, codes, technology and practices as at that time. They do not purport to include any manner of legal advice or opinion. New information or changes in conditions and regulatory requirements may occur in future, which will change the conclusions presented here.

This report is confidential to the client. Unless otherwise agreed in writing by H Fraser Consulting Ltd, no other party may use, make use of or rely on the contents of the report. No liability is accepted by H Fraser Consulting Ltd for any use of this report, other than for the purposes for which it was originally prepared and provided.

#### **CONTENTS**

1	INTRODUCTION	1
1.1	Objective	1
1.2	Scope of works	1
2	BACKGROUND INFORMATION	2
3	SCREENING	6
4	SCOPING	7
4.2	Matters of concern	7
5	CONCLUSIONS	8
6	REFERENCES	9
<b>FIGUR</b> Figure	RES e 2.1 Site location	2
	2.1 Background information	
	2.2 BGS borehole records	
APPEN Appen Appen	•	



#### 1 INTRODUCTION

Ground and Water Limited has instructed H Fraser Consulting Ltd (HFCL) to provide the hydrogeological aspects of a Screening and Scoping Study at the following property:

Basement Flat, 143 Gloucester Avenue, NW1 8LA.

The site is in the London Borough of Camden.

#### 1.1 Objective

The objective of this report is to provide the hydrogeological aspects of a Screening and Scoping Study to support a planning application for construction of a basement at Basement Flat,143 Gloucester Avenue, NW1 8LA.

#### 1.2 Scope of works

The following works have been undertaken:

- Desk study
- Screening assessment with regards to groundwater
- Scoping assessment to identify potential impacts
- Reporting

The work has been undertaken in accordance with the requirements of London Borough of Camden's Planning Guidance CPG4 'Basements and Lightwells' (referred to as CPG4) and Arup's 'Geological Hydrogeological and Hydrological Study, Guidance for Subterranean Development' (Arup, 2012, referred to throughout this report as the GHHS).

This assessment is limited to an assessment of the hydrogeological aspects of the proposed development and does not purport to make any comment on surface water flooding, hydrology, contamination or pollution, engineering, land stability, design or construction issues.

The work has been undertaken by Hannah Fraser, Director of HFCL, who is a Chartered Geologist with 19 years' experience as a hydrogeologist and consultant.

#### 2 BACKGROUND INFORMATION

Background information has been derived from a Groundsure report for the site (Appendix A); geological information has been derived from on-line BGS sources (Geology of Britain Viewer, Geolndex, Lexicon); on-line mapping and aerial photography have been derived from Streetmap and GoogleEarth. Table 2.1 presents relevant background information for the site. The site location is shown in Figure 2.1.

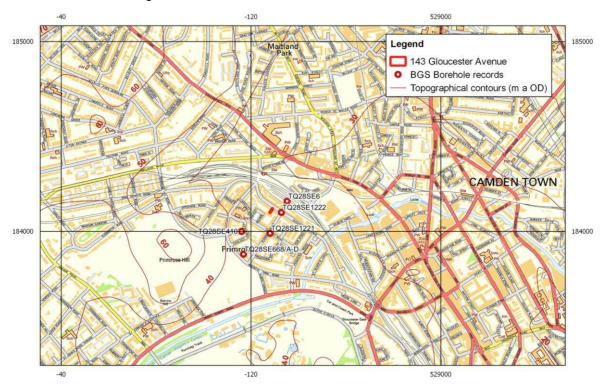


Figure 2.1 Site location
Contains Ordnance Survey data © Crown copyright and database right 2016

**Table 2.1 Background information** 

Address	Basement Flat,143 Gloucester Avenue, NW1 8LA
NGR	528109, 184112
Description	The existing property comprises a three storey brick built terraced house with a basement. There is a small front garden which is predominantly paved. The front door is accessed via steps up from the front garden level, on the left hand side of the property (looking at the property from the street). Within the front garden, on the right hand side, there are steps leading down to a lightwell. Within the lightwell, there is a door access to the property at basement level, a window on the front of the property, and access to a small storage space beneath the front garden.  Existing plans and sections are shown in Appendix B.

Ordnance survey topographic data<sup>1</sup> show the site to be below the 35 m OD contour, with ground elevations falling from Primrose Hill in the west. Figure 2.1 shows 10 m topographical contours.

## Proposed development

The proposed development is to excavate a basement room below the front garden area, connected to the existing basement level via stairs below the access stairs to the front door. The existing lightwell would remain, with a window from the new basement room opening onto it. The new basement room will be 1.2 m lower than the existing basement level, and 0.8 m lower than the lightwell floor. Site plans are shown in Appendix B.

#### Planning history at neighbouring properties

A search of the on-line planning records on <a href="https://www.camden.gov.uk">www.camden.gov.uk</a> for records held for neighbouring properties revealed the following:

141 Gloucester Avenue was the subject of a planning application in 2007 to convert an existing basement flat and maisonette into a family home. The plans clearly show a basement level. Street photography shows No. 141 to be at a lower elevation than No. 143, with the ground floor accessed from ground level rather than via a flight of stairs. It is likely that the basement level extends below the basement at No. 143. The plans show the boundary with No. 143 to predominantly comprise access stairs from the basement to the garden level.

145 Gloucester Avenue was the subject of a planning application in 1988 to provide a flat in the basement level. There are no plans to view. The property is on the same level as No. 143, and it is likely that the basement is at a similar elevation.

#### Geology

Geological mapping<sup>2</sup> shows the area to be underlain by London Clay, which is extensive across the area with no superficial deposits.

The London Clay 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 occur in places. Glauconite is present in some of the sands and in some clay beds, and white mica occurs at some levels<sup>3</sup>

Table 2.2 presents geological data from selected local BGS borehole records<sup>4</sup>, and Figure 2.1 shows the location of the boreholes. The local borehole records confirm the presence of Made Ground overlying London Clay.

#### **Aquifer status**

The London Clay is classified by the Environment Agency as unproductive strata (rock layers with low permeability and negligible significance for water supply or river base flow). The London Clay holds water but does not transmit water readily due to its low permeability.

<sup>1</sup> www.streetmap.co.uk

<sup>&</sup>lt;sup>2</sup> http://mapapps.bgs.ac.uk/geologyofbritain/home.html

<sup>&</sup>lt;sup>3</sup> http://www.bgs.ac.uk/lexicon/lexicon.cfm?pub=LC

<sup>4</sup> http://mapapps2.bgs.ac.uk/geoindex/home.html

	Groundwater was recorded in two of the BGS borehole logs presented in Table 2.2, at depths of c. 31.5 m bgl (TQ28SE410) and 5.48 m bgl (TQ28SE668/A-D). No other groundwater observations were recorded.
Watercourses	The Grand Union Regent's canal lies 321 m southeast of the site. The closest surface water abstraction licence is from the canal, 385 m east of the site. <sup>5</sup>
	The site does not lie close to a former course of one of the 'lost rivers' of London.
Spring lines	There are no springs shown on OS mapping, and no known local geological features that might give rise to springs.
Wells	The nearest groundwater abstraction licence is 612 m southwest of the site, at Barrow Hill. This is for a potable abstraction, held by Thames Water Utilities, and is very likely from the Chalk aquifer underlying the London Clay. The site lies within 275 m of the outer source protection zone and 401 m of the inner source protection zone of the Barrow Hill abstraction. <sup>6</sup> The BGS well records <sup>7</sup> indicate that there is a well approximately 550 m south of the site, abstracting from the Chalk aquifer below the London Clay.
Groundwater flooding	There are no British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site. The area is not considered prone to groundwater flooding, based on rock type.8

<sup>&</sup>lt;sup>5</sup> Groundsure report GS-2957178 <sup>6</sup> Groundsure report GS-2957178 <sup>7</sup> http://mapapps2.bgs.ac.uk/geoindex/home.html <sup>8</sup> Groundsure report GS-2957178

**Table 2.2 BGS borehole records** 

Ref	Name	Easting	Northing	Description
TQ28SE1221	Gloucester Ave Sewer 7	528100	183990	Made Ground (road surface over ash, brick and tarmac fragments) to 1 m, made ground (soft brown sandy clay with ash and brick fragments to 2 m, firm to stiff brown silty clay with grey silty partings at the top to 8.5 m, stiff to very stiff brown slightly fissured silty clay to 11.5 m, very stiff dark brown fissured silty clay to 15 m. No groundwater data.
TQ28SE410	Metropolitan Water Board 28	527950	184000	Ground level at 38.61 m a OD. Tarmacadam, concrete, and hardcore to 0.46m, soft (becoming firm at 2.7 m) brown mottled clay (probably fill to 2.7 m) to 4.57 m, firm brown and blue clay to 6.1 m, firm becoming stiff fissured brown clay to 12.5 m, stiff dark brown and blue clay to 13.11 m, stiff grey-blue fissured clay to 24.08 m, stiff dark grey-blue fissured silty clay to 31.39 m, soft becoming firm dark grey silty clay to 31.7 m, stiff dark grey-blue fissured silty clay to 39.62 m, stiff brown-grey fissured silty clay to 41.45 m, stiff dark grey-green clay to 42.06 m, stiff dark brown-grey silty clay to 43.59 m. Water seeping from clay from 31.4 m to 31.7 m.
TQ28SE1222	Gloucester Ave Sewer 8	528160	184100	Made Ground (road surface over brown sandy clay with brick and chalk fragments) to 2 m, made ground (soft dark grey clay with black organic matter and brick fragments) to 3 m, firm brown silty clay with grey silty partings and occasional fine sandy pockets to 6 m, firm to stiff brown slightly fissured silty clay to 9.4 m, moderately weathered claystone weakly cemented to 9.43 m, stiff to very stiff brown silty clay to 15 m. No groundwater data.
TQ28SE6	L.X.W.R. Camden Street St Pancras	528190	184159	Made Ground to 5.49 m, London Clay to 49.38 m, Woolwich Reading Beds to 68.88 m, Thanet Beds to 71.32 m, Chalk to 121.92 m. No groundwater data.
TQ28SE668/A-D	REGENTS PARK ROAD BH2	527960	183880	Ground level at 34.9 m. Made Ground to 0.76 m, firm to stiff brown mottled clay to 3.81 m, stiff brown blue silty clay to 11.74 m, very stiff blue silty clay to 12.2 m. Groundwater at 29.42 m, or 5.48 m bgl. N.b. two other borehole logs in this record showed similar geology but with a record of 'borehole dry'.

Local BGS borehole records are selected as those closest to the property. Borehole locations are shown on Figure 2.1.

#### 3 SCREENING

A screening assessment has been undertaken in accordance with the methodology set out in Section 6.2 and Appendix E2 of the GHHS (Arup, 2012). The results are presented in Table 3.1.

**Table 3.1 Screening assessment** 

Ref	Question	Answer (yes/no/unknown)	Action
Q1a	Is the site located directly above an aquifer?	No	No further action
Q1b	Will the proposed basement extend beneath the water table surface?	Unknown	Take forward to scoping stage
Q2	Is the site within 100m of a watercourse, well (used/disused) or potential spring line?	No	No further action
Q3	Is the site within the catchment of the pond chains on Hampstead Heath?	No	No further action
Q4	Will the proposed basement development result in a change in the proportion of hard surface/paved areas?	No	No further action
Q5	As part of the drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDs)	No	No further action
Q6	Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than the mean water level in any local pond or spring line?	No	No further action

#### 4 SCOPING

This section of the report summarises the pertinent information as a Conceptual Model, and then describes the matters of concern that need to be considered in the Impact Assessment.

#### 4.1 Conceptual model

The proposed development is to excavate a basement room below the front garden area, connected to an existing basement level via stairs below the access stairs to the front door. The existing lightwell would remain, with a window from the new basement room opening onto it. The new basement room will be 1.2 m lower than the existing basement level and 0.8 m lower than the lightwell floor level.

The neighbouring properties both have basements. The basement at No 145 is likely to be at a similar elevation as the existing basement at No. 143. The basement at No. 141 is likely to be at a lower elevation than No. 143.

The underlying geology is London Clay, which is classified by the Environment Agency as unproductive strata. Groundwater flow in the London Clay is generally very slow, due to the low permeability of the clay, although groundwater seepages and flows can be encountered on sand partings or fissures within the clay. It is noted that two of the five local BGS borehole logs recorded groundwater, at depths deeper than the likely depth of the proposed basement, but that these observations made during drilling do not provide a reliable indication of groundwater elevations at the site. Whilst groundwater flows are not high volume, there is the potential for groundwater to slowly back up around an underground structure. Where groundwater is close to surface, or there are neighbouring basements, this has the potential to cause issues with groundwater flooding or ingress to basements.

The depth of the proposed basement room is not substantially different than existing basements, and it is not considered likely that the development will significantly impact the groundwater regime. The proposed basement room is separate from the existing development, and it is unlikely that groundwater backing up around the structure would cause nuisance to neighbouring properties.

The front garden area is largely hardstanding, and it is not anticipated that there will be changes to ground cover as a result of the development. It is not anticipated that there will be any change to the amount of surface water directed to groundwater than at present.

There are no nearby water features of concern.

#### 4.2 Matters of concern

It is not considered that the new basement room will have a significant impact on the groundwater regime. Nonetheless, measures should be taken to protect the excavation against groundwater ingress during construction. The excavation should be kept dry. In addition, the basement design should include protection against ingress of groundwater or soil moisture to the finished development. Any drainage design should consider the requirements of sustainable urban drainage.

#### 5 CONCLUSIONS

The proposed development is to excavate a basement room below the front garden area, connected to an existing basement level via stairs below the access stairs to the front door. The existing lightwell would remain, with a window from the new basement room opening onto it. The new basement room will be 1.2 m lower than the existing basement level and 0.8 m lower than the lightwell floor level.

The underlying geology is London Clay, which is classified by the Environment Agency as unproductive strata. Groundwater flow in the London Clay is generally very slow, due to the low permeability of the clay, although groundwater seepages and flows can be encountered on sand partings or fissures within the clay.

The depth to groundwater is not known. Two of five local BGS borehole logs recorded groundwater, at depths deeper than the likely depth of the proposed basement. However these observations made during drilling do not provide a reliable indication of groundwater elevations at the site.

The depth of the proposed basement room is not substantially different than existing basements, and it is not considered likely that the development will significantly impact the groundwater regime. The proposed basement room is separate from the existing development, and it is unlikely that groundwater backing up around the structure would cause nuisance to neighbouring properties.

It is not considered that the proposed basement room will have a significant impact on the groundwater regime. As a precaution, measures should be taken to protect the excavation against groundwater ingress during construction. The excavation should be kept dry. In addition, the basement design should include protection against ingress of groundwater or soil moisture to the finished development. Any drainage design should consider the requirements of sustainable urban drainage.

#### **6 REFERENCES**

**British Geological Survey, 2006.** North London, England and Wales Sheet 256. Bedrock and superficial deposits.1:50,000.

**Arup, 2012.** Geological Hydrogeological and Hydrological Study, Guidance for subterranean development

London Borough of Camden CPG4 'Basements and Lightwells'

### **APPENDIX A**

**Groundsure Report** 



## Groundsure Enviroinsight

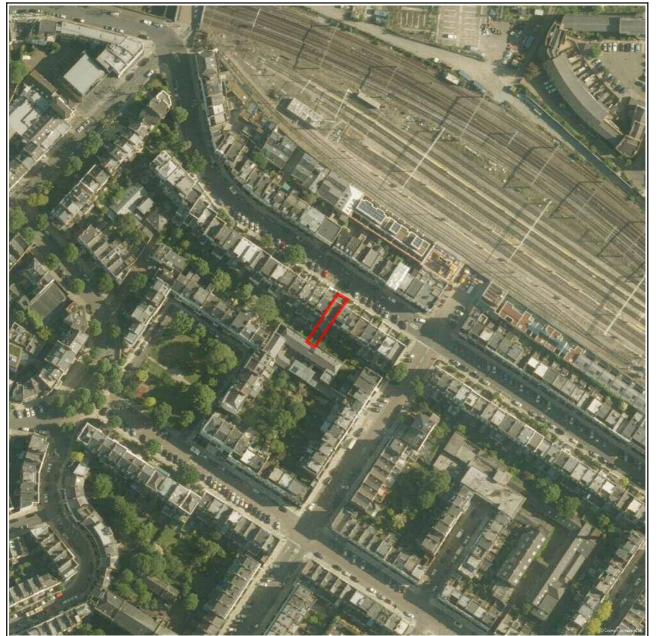
Address: 143, GLOUCESTER AVENUE, LONDON, NW1 8LA

Date: 4 May 2016

Reference: GS-2957178

Client: H Fraser Consulting Ltd

NW NE



Aerial Photograph Capture date: 04-May-2014

Grid Reference: 528109,184112

Site Size: 0.02ha

Report Reference: GS-2957178

Client Reference: 30143\_143\_Gloucester\_Avenue

2



## **Contents Page**

Contents Page	3
Overview of Findings	6
Using this report	10
1. Historical Land Use	11
1. Historical Industrial Sites	12
1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping	
1.2 Additional Information – Historical Tank Database	
1.3 Additional Information – Historical Energy Features Database	
1.4 Additional Information – Historical Petrol and Fuel Site Database	
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	17
1.6 Potentially Infilled Land	18
2. Environmental Permits, Incidents and Registers Map	20
2. Environmental Permits, Incidents and Registers	21
2.1 Industrial Sites Holding Licences and/or Authorisations	21
2.1.1 Records of historic IPC Authorisations within 500m of the study site:	21
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:	
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500 study site:	
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:	
2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:	
2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:	
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:	
2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500i	
study site:	
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	24
2.2 Dangerous or Hazardous Sites	
2.3 Environment Agency Recorded Pollution Incidents	
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:	
2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:	
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	
3. Landfill and Other Waste Sites Map	26
3. Landfill and Other Waste Sites	27
3.1 Landfill Sites	
3.1.1 Records from Environment Agency landfill data within 1000m of the study site:	
3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:	
3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site	
3.2 Other Waste Sites	
3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:	
3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:	
4. Current Land Use Map	30
4. Current Land Uses	31
4.1 Current Industrial Data	31
4.2 Petrol and Fuel Sites	32
4.3 National Grid High Voltage Underground Electricity Transmission Cables	
4.4 National Grid High Pressure Gas Transmission Pipelines	35
5. Geology	36
5.1 Artificial Ground and Made Ground	36

Report Reference: GS-2957178



	5.2 Superficial Ground and Drift Geology	36
	5.3 Bedrock and Solid Geology	36
6 F	lydrogeology and Hydrology	37
6a.	Aquifer Within Superficial Geology	37
	Aquifer Within Bedrock Geology and Abstraction Licenses	38
	Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses	39
	Hydrogeology - Source Protection Zones within confined aquifer	40
	Hydrology – Detailed River Network and River Quality	41
6.F	Hydrogeology and Hydrology	42
	6.1 Aquifer within Superficial Deposits	
	6.2 Aquifer within Bedrock Deposits	
	6.3 Groundwater Abstraction Licences	
	6.4 Surface Water Abstraction Licences	
	6.6 Source Protection Zones	
	6.7 Source Protection Zones within Confined Aquifer	
	6.8 Groundwater Vulnerability and Soil Leaching Potential	
	6.9 River Quality	
	6.9.1 Biological Quality:	
	6.9.2 Chemical Quality:	
	6.10 Detailed River Network	
	6.11 Surface Water Features	
7a.	Environment Agency Flood Map for Planning (from rivers and the sea)	50
	Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map	51
	looding	52
<i>/</i> I	7.1 River and Coastal Zone 2 Flooding	
	7.1 River and Coastal Zone 2 Flooding	
	7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating	
	7.4 Flood Defences	
	7.5 Areas benefiting from Flood Defences	
	7.6 Areas benefiting from Flood Storage	
	7.7 Groundwater Flooding Susceptibility Areas	
	7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundarthe study site? No	ry of
	7.7.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological	_
	conditions?	
	7.8 Groundwater Flooding Confidence Areas	
8.	Designated Environmentally Sensitive Sites Map	54
8. I	Designated Environmentally Sensitive Sites	55
	8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:	
	8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:	
	8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:	
	8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:	
	8.5 Records of Ramsar sites within 2000m of the study site:	
	8.6 Records of Ancient Woodland within 2000m of the study site:	
	8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:	
	8.8 Records of World Heritage Sites within 2000m of the study site:	
	8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:	
	8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:	
	8.11 Records of National Parks (NP) within 2000m of the study site:	
	8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:	
	o. 13 necords of initiate valuerable boiles within booth of the study site	) /

Report Reference: GS-2957178



8.14 Records of Green Belt land within 2000m of the study site:	57
9. Natural Hazards Findings	58
9.1 Detailed BGS GeoSure Data	58
9.1.1 Shrink Swell	58
9.1.2 Landslides	
9.1.3 Soluble Rocks	
9.1.4 Compressible Ground	59
9.1.5 Collapsible Rocks	59
9.1.6 Running Sand	59
9.2 Radon	59
9.2.1 Radon Affected Areas	59
9.2.2 Radon Protection	60
10. Mining	61
10.1 Coal Mining	61
10.2 Non-Coal Mining	61
10.3 Brine Affected Areas	61
Contact Details	62
Standard Terms and Conditions	64



## **Overview of Findings**

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	11	41	58
1.2 Additional Information – Historical Tank Database	0	0	7	13
1.3 Additional Information – Historical Energy Features Database	0	0	3	52
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	3	10	46
1.6 Potentially Infilled Land	0	0	1	20
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	1	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	3	6
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	3
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA	0	0	0	0

Report Reference: GS-2957178

1990



					LOCATION INTE	ELLIGENCE
Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
3.1 Landfill Sites						
3.1.1 Environment Agency Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency Historic Landfill Sites	0	0	0	0	0	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency Licensed Waste Sites	0	0	0	0	2	4
Section 4: Current Land Use	On-site	5	0-50m	51-25	0 2	51-500
4.1 Current Industrial Sites Data	0		3	13	No	t searched
4.2 Records of Petrol and Fuel Sites	0		0	0		3
4.3 National Grid Underground Electricity Cables	0		0	0		30
4.4 National Grid Gas Transmission Pipelines	0		0	0	:	0
<ul><li>5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?</li><li>5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.</li></ul>			No	one		
Section 6: Hydrogeology and Hydrology  6.1 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?				00m		
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?			Y	es		
	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	9	10
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	2	0	3
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	5	2
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	2	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	0	0	0	0	Not searched	Not searched
	On-site	0-50m	51-250	251-500	501-1000	1000- 1500



Section 6: Hydrogeology and Hydrology	0-500m					
6.9 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	No	Yes
6.10 Detailed River Network entries within 500m of the site	0	0	0	3	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched
Section 7: Flooding						
7.1 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?			٨	10		
7.2 Are there any Environment Agency Zone 3 floodplains within 250m of the study site			٨	lo		
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?			Very	Low		
7.4 Are there any Flood Defences within 250m of the study site?			٨	10		
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?			٨	10		
7.6 Are there any areas used for Flood Storage within 250m of the study site?			٨	lo		
7,7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?			Not F	Prone		
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?			Not Ap	plicable		
Section 8: Designated Environmentally Sensitive	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
Sites						2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	0
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	3
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0



Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards	
9.1 What is the maximum risk of natural ground subsidence?	Moderate
9.1.1 What is the maximum Shrink-Swell hazard rating identified on the study site?	Moderate
9.1.2 What is the maximum Landslides hazard rating identified on the study site?	Very Low
9.1.3 What is the maximum Soluble Rocks hazard rating identified on the study site?	Negligible
9.1.4 What is the maximum Compressible Ground hazard rating identified on the study site?	Negligible
9.1.5 What is the maximum Collapsible Rocks hazard rating identified on the study site?	Very Low
9.1.6 What is the maximum Running Sand hazard rating identified on the study site?	Negligible
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining	
10.1 Are there any coal mining areas within 75m of the study site?	No
10.2 Are there any Non-Coal Mining areas within 50m of the study site boundary?	No
10.3 Are there any brine affected areas within 75m of the study site?	No



## Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

#### 1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

#### 2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

#### 3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

#### 4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

#### 5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

#### 6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licenses, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

#### 7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

#### 8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

#### 9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

#### 10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

#### 11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

#### **Note: Maps**

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

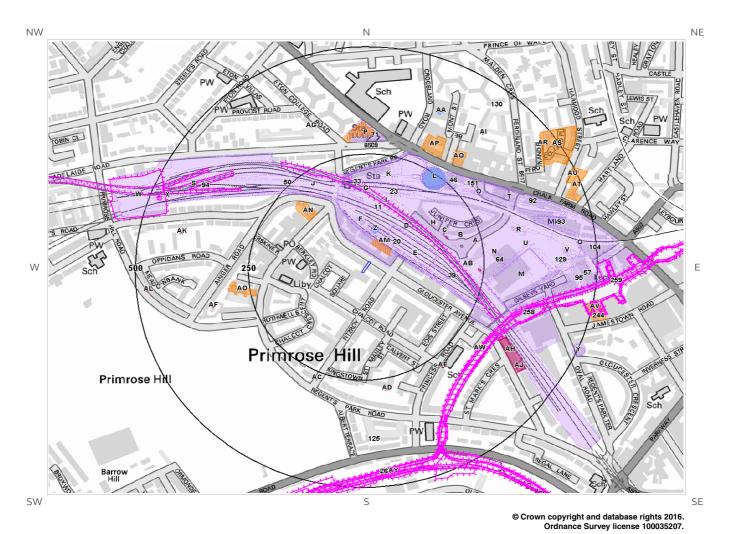
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

Report Reference: GS-2957178



## 1. Historical Land Use





Report Reference: GS-2957178



## 1. Historical Industrial Sites

#### 1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 110

ID	Distance [m]	Direction	Use	Date
1A	12	NE	Railway Land	1911
2AM	15	NE	Goods Station	1957
3D	15	NE	Railway Sidings	1957
4A	46	NE	Goods Depot	1882
5C	46	NE	Railway Sidings	1882
6E	46	NE	Railway Sidings	1911
7B	46	NE	Railway Sidings	1938
8B	46	NE	Railway Sidings	1920
9H	48	NE	Railway Sidings	1894
10C	49	NE	Railway Sidings	1948
11	50	NE	Railway Sidings	1989
12D	51	NE	Railway Sidings	1973
13D	51	NE	Railway Sidings	1968
14E	55	NE	Railway Building	1911
15E	57	NE	Engine Shed	1882
16E	58	NE	Railway Building	1894
17E	58	NE	Engine Shed	1938
18E	58	NE	Engine Shed	1920
19E	60	NE	Engine Shed	1948
20	61	NE	Goods Station	1968
21F	85	N	Railway Building	1973
22F	85	N	Railway Building	1989
23	106	N	Railway Station	1882
24G	120	N	Railway Station	1920
25G	120	N	Railway Station	1938
26G	122	N	Railway Station	1948
27H	122	NE	Railway Sidings	1911
28G	123	N	Railway Station	1911
29D	126	NE	Tunnel	1989
30G	129	N	Railway Station	1894
311	139	N	Railway Building	1957
321	142	N	Railway Buildings	1948
33	165	N	Railway Station	1957
34G	166	N	Railway Station	1968

Report Reference: GS-2957178



			LOCA	TION INTELLIGENCE
35G	166	N	Railway Station	1989
36G	166	N	Railway Station	1973
37J	171	NW	Railway Sidings	1920
38J	171	NW	Railway Sidings	1938
39	179	E	Railway Building	1948
40K	199	N	Railway Building	1894
41K	208	N	Railway Building	1894
42AB	209	E	Railway Building	1948
43L	214	NE	Unspecified Warehouse	1938
44L	214	NE	Unspecified Warehouse	1920
45L	214	NE	Unspecified Tank	1882
46	215	NE	Unspecified Warehouses	1948
47L	216	NE	Railway Building	1894
48L	217	NE	Railway Building	1973
49L	217	NE	Railway Building	1968
50	247	NW	Railway Building	1948
51M	250	E	Goods Shed	1973
52M	250	E	Goods Shed	1968
53M	254	E	Goods Shed	1957
54M	255	E	Goods Station	1938
55M	255	E	Goods Station	1920
56M	258	E	Goods Shed	1882
57	258	E	Goods Station	1948
58N	259	E	Railway Building	1968
59N	259	E	Goods Station	1973
60M	260	E	Goods Station	1894
61M	260	E	Goods Station	1911
62N	268	Е	Railway Building	1920
63N	268	E	Railway Building	1938
64	273	E	Railway Building	1911
65N	273	E	Railway Building	1894
66N	274	E	Railway Building	1948
670	278	NE	Railway Building	1938
680	278	NE	Railway Building	1920
69P	280	N	Unspecified Station	1957
70P	280	N	Electricity Railway Station	1948
71	281	N	Unspecified Station	1920
720	281	NE	Railway Building	1894
73P	282	N	Unspecified Station	1938
74P	284	N	London Transport Station	1968
75P	284	N	London Transport Station	1973
76P	284	N	London Transport Station	1989
77Q	316	NE	Unspecified Commercial/Industrial	1920
78Q	316	NE	Unspecified Commercial/Industrial	1938



				LOCATION INTELLIGENCE
79R	319	Е	Railway Building	1920
80R	319	E	Railway Building	1894
81R	319	E	Railway Building	1957
82R	319	E	Railway Building	1948
83S	326	NW	Tunnel	1989
845	326	NW	Tunnel	1957
85S	326	NW	Tunnel	1973
86S	326	NW	Tunnel	1968
87T	326	NE	Railway Building	1894
88T	333	NE	Railway Building	1973
89T	333	NE	Railway Building	1968
90U	339	E	Railway Building	1894
91U	339	E	Railway Building	1948
92	359	NE	Railway Building	1894
93	374	E	Railway Building	1894
94	393	NW	Railway Building	1948
95	407	E	Railway Building	1894
96V	424	E	Railway Building	1968
97V	424	E	Railway Building	1973
98V	428	E	Railway Station	1920
99V	431	E	Railway Building	1948
100V	432	E	Railway Buildings	1894
101W	451	W	Cuttings	1968
102W	451	W	Cuttings	1957
103X	457	W	Railway Building	1948
104	464	E	Railway Building	1894
105X	474	W	Air Shafts	1989
106Y	491	SE	Unspecified Tank	1920
107Y	491	SE	Unspecified Tank	1948
108Y	491	SE	Unspecified Tank	1968
109Y	491	SE	Unspecified Tank	1989
110Y	491	SE	Unspecified Tank	1973

#### 1.2 Additional Information - Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

20

ID	Distance (m)	Direction	Use	Date
111Z	66	N	Unspecified Tank	1952
112Z	66	N	Unspecified Tank	1952
113Z	66	N	Unspecified Tank	1952

Report Reference: GS-2957178



				CATION INTELLIGENCE
1141	132	N	Unspecified Tank	1952
1151	133	N	Unspecified Tank	1952
1161	133	N	Unspecified Tank	1952
117L	214	NE	Unspecified Tank	1896
118AA	376	NE	Unspecified Tank	1991
119AA	376	NE	Unspecified Tank	1987
120AA	376	NE	Unspecified Tank	1991
121AA	376	NE	Unspecified Tank	1982
122AA	378	NE	Unspecified Tank	1995
123AA	378	NE	Unspecified Tank	1994
124AA	378	NE	Unspecified Tank	1996
125	390	S	Unspecified Tank	1875
126V	408	E	Unspecified Tank	1991
127V	408	E	Unspecified Tank	1991
128V	408	E	Unspecified Tank	1986
129	416	E	Unspecified Tank	1992
130	457	NE	Unspecified Tank	1875

#### 1.3 Additional Information - Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

55

ID	Distance (m)	Direction	Use	Date
131C	174	E	Electricity Substation	1996
132AB	237	E	Electricity Substation	1995
133AB	238	E	Electricity Substation	1996
134AC	266	SW	Electricity Substation	1952
135AC	266	SW	Electricity Substation	1952
136AC	266	SW	Electricity Substation	1991
137AC	267	SW	Electricity Substation	1969
138AC	267	SW	Electricity Substation	1952
139AD	274	S	Electricity Substation	1987
140AD	274	S	Electricity Substation	1991
141AD	274	S	Electricity Substation	1952
142AE	276	SE	Electricity Substation	1968
143AE	276	SE	Electricity Substation	1987
144AE	276	SE	Electricity Substation	1991
145AE	276	SE	Electricity Substation	1969
146AE	276	SE	Electricity Substation	1952
147AE	276	SE	Electricity Substation	1971
148AE	276	SE	Electricity Substation	1995

Report Reference: GS-2957178



			LOC	ATION INTELLIGENCE
149AE	277	SE	Electricity Substation	1996
1500	285	NE	Electricity Substation	1952
151	287	NE	Electricity Substation	1994
152AH	332	SE	Electricity Substation	1972
153AF	335	W	Electricity Substation	1972
154AF	336	W	Electricity Substation	1991
155AG	336	N	Electricity Substation	1983
156AF	336	W	Electricity Substation	1983
157AF	336	W	Electricity Substation	1991
158AG	336	N	Electricity Substation	1994
159AG	336	N	Electricity Substation	1968
160AG	337	N	Electricity Substation	1991
161AH	338	SE	Electricity Substation	1987
162AH	338	SE	Electricity Substation	1969
163AH	338	SE	Electricity Substation	1952
164AH	338	SE	Electricity Substation	1971
165AH	338	SE	Electricity Substation	1987
166AH	338	SE	Electricity Substation	1991
167AH	339	SE	Electricity Substation	1982
168AI	386	NE	Electricity Substation	1991
169AI	386	NE	Electricity Substation	1996
170AI	386	NE	Electricity Substation	1994
171AI	386	NE	Electricity Substation	1995
172AI	388	NE	Electricity Substation	1968
173AI	388	NE	Electricity Substation	1969
174AI	388	NE	Electricity Substation	1971
175AJ	392	SE	Electricity Substation	1991
176AJ	403	SE	Electricity Substation	1987
177AJ	403	SE	Electricity Substation	1953
178AJ	403	SE	Electricity Substation	1952
179AJ	403	SE	Electricity Substation	1972
180AJ	403	SE	Electricity Substation	1983
181AK	404	W	Electricity Substation	1991
182AK	405	W	Electricity Substation	
183AL	471	W	Electricity Substation	
184AL	472	W	Electricity Substation	
185AL	472	W	Electricity Substation	

#### 1.4 Additional Information - Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary:

0

Report Reference: GS-2957178

Database searched and no data found.



#### 1.5 Additional Information - Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary:

59

ID	Distance (m)	Direction	Use	Date
186AM	35	NE	Garage	1952
187AM	36	NE	Garage	1952
188AM	36	NE	Garage	1952
189AN	158	NW	Garage	1963
190AN	158	NW	Garage	1972
191AN	158	NW	Garages	1952
192AN	164	NW	Garages	1953
193AO	234	W	Garage	1972
194AO	235	W	Garages	1953
195AO	236	W	Garage	1963
196AO	236	W	Garages	1952
197AO	237	W	Garage	1983
198AO	237	W	Garage	1991
199P	281	N	Garages	1952
200AP	287	NE	Garage	1991
201AP	287	NE	Garage	1982
202AP	287	NE	Garage	1991
203AP	287	NE	Garage	1987
204AP	288	NE	Garage	1970
205AP	288	NE	Garage	1965
206AP	288	NE	Garage	1968
207P	292	Ν	Garage	1952
208P	292	Ν	Garage	1952
209AQ	293	NE	Garage	1987
210AQ	293	NE	Garage	1991
211AQ	293	NE	Garage	1991
212AQ	293	NE	Garage	1982
213AR	439	NE	London Transport Garage	1995
214AR	439	NE	London Transport Garage	1994
215AR	441	NE	London Transport Garage	1987
216AR	441	NE	London Transport Garage	1991
217AR	441	NE	London Transport Garage	1991
218AR	441	NE	Garage	1965
219AS	444	NE	Garage	1968

Report Reference: GS-2957178



			LOCA	FION INTELLIGENCE
220AS	444	NE	London Transport Executive Garage	1970
221AS	445	NE	London Transport Garage	1975
222AS	445	NE	London Transport Garage	1975
223AS	445	NE	London Transport Executive Garage	1963
224AS	445	NE	London Transport Garage	1991
225AS	445	NE	London Transport Garage	1991
226AS	445	NE	London Transport Garage	1986
227AS	445	NE	London Transport Garage	1992
228AT	456	E	Garage	1991
229AT	456	E	Garage	1991
230AT	456	E	Garage	1992
231AT	456	E	Garage	1986
232AT	456	Е	Garage	1975
233AT	456	Е	Garage	1975
234AT	456	E	Garage	1996
235AT	459	Е	Motor Body Works	1952
236AU	470	NE	Garage	1952
237AU	470	NE	Garage	1952
238AU	470	NE	Garage	1952
239AU	481	NE	Motor Body Works	1952
240AU	481	NE	Motor Body Works	1952
241AV	483	Е	Garages	1952
242AV	483	Е	Garage	1952
243AV	483	Е	Garage	1952
244	499	E	Garages	1971

#### 1.6 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site:

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
245D	126	NE	Tunnel	1989
246	310	SE	Canal	1882
247AW	310	SE	Canal	1920
248AW	310	SE	Canal	1938
249AX	311	SE	Canal	1973
250AX	311	SE	Canal	1968
251AX	311	SE	Canal	1989
252AX	311	SE	Canal	1957
253	313	SE	Canal	1894
254S	326	NW	Tunnel	1957
255S	326	NW	Tunnel	1973
256S	326	NW	Tunnel	1968

Report Reference: GS-2957178

Client Reference: 30143\_143\_Gloucester\_Avenue

18

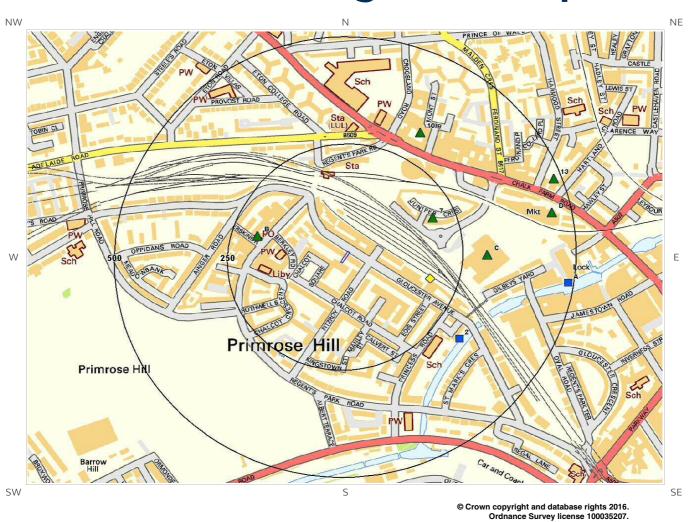
21



257S	326	NW	Tunnel	1989
258	338	Е	Canal	1882
259	413	E	Canal	1882
260AY	443	SE	Canal	1911
261	443	SE	Canal	1948
262AY	448	SE	Canal	1882
263W	451	W	Cuttings	1957
264W	451	W	Cuttings	1968
265X	474	W	Air Shafts	1989



# 2. Environmental Permits, Incidents and Registers Map





Report Reference: GS-2957178



## 2. Environmental Permits, **Incidents and Registers**

#### 2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reversity information:	al the following
2.1.1 Records of historic IPC Authorisations within 500m of the study site:	
	C
Database searched and no data found.	
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:	
	C
Database searched and no data found.	
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled 500m of the study site:	waters) within
	C
Database searched and no data found.	
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site	<u>;</u>
	C
Database searched and no data found.	

Report Reference: GS-2957178



#### 2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

1

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
1	188	E	528295 184059	Name: Todd-ao Uk, 13 Hawley Crescent, London Status: Not Active Receiving Water: -	Authorised Substances: Silver

#### 2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

9

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details			
5B	193	W	527913 184157	Address: Primrose Valet, 91a Regents Park Road, NW1 8UR Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified		
6B	193	W	527913 184157	Address: Primrose Valet, 91a Regents Park Road, NW1 8UR Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified		
7	198	NE	528300 184200	Address: Lex Volvo-regents Pk Bodyshop, Dumpton Place, Gloucester Ave, NW1 8JD Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified		
8C	303	E	528421 184113	Address: Wm Morrisons Supermarkets Plc, Chalk Farm Road, NW1 8AA Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified		
9C	303	E	528421 184113	Address: Wm Morrisons Supermarkets plc, Chalk Farm Road, NW1 8AA Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified		
10	318	NE	528273 184399	Address: Texaco, 81 - 85 Chalk Farm Road, London, NW1 8AR Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified		

Report Reference: GS-2957178



ID	Distance (m)	Direction	NGR	Details		
11D	455	E	528564 184212	Address: Wm Morrisons Esso, 29 Chalk Farm Road, London, NW1 8AG Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified	
12D	455	E	528564 184212	Address: Esso Chalk Farm Service Station, 29 Chalk Farm Road, London, NW1 8AG Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified	
13	481	E	528568 184291	Address: Esso 29, Chalk Farm Road, London, NW1 8AG Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified	

#### 2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

#### 2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

3

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details			
2	313	SE	528360 183920	Address: FITZROY BRIDGE OUTLET, PRIMROSE HIL, FITZROY BRIDGE OUTLET, PRIMROSE, HILL, CAMDEN, LONDON, -, - Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CTMR.0387 Permit Version: 1	Receiving Water: Status: TRANSFERRED FROM R(PP)A 1951- 1961 Issue date: 28/03/1980 Effective Date: 28-Mar-1980 Revocation Date: -		
3A	487	E	528600 184050	Address: 30 OVAL ROAD, CAMDEN TOWN, LONDON,, 30 OVAL ROAD, CAMDEN TOWN, LONDO, N, NW1 7DE, -, - Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CNTM.1566 Permit Version: 1	Receiving Water: Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 01/09/1994 Effective Date: 01-Sep-1994 Revocation Date: 01/10/1996		
4A	487	E	528600 184050	Address: 30 OVAL ROAD, CAMDEN TOWN, LONDON,, 30 OVAL ROAD, CAMDEN TOWN, LONDO, N, NW1 7DE, -, - Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CATM.2853 Permit Version: 1	Receiving Water: Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 01/04/1997 Effective Date: 01-Apr-1997 Revocation Date: 30/09/2005		

Report Reference: GS-2957178



2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:	n
	0
Database searched and no data found.	
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the st site:	tudy
Database searched and no data found.	0
2.2 Dangerous or Hazardous Sites	
Records of COMAH & NIHHS sites within 500m of the study site:	0
Database searched and no data found.	
2.3 Environment Agency Recorded Pollution Incidents	
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:	
Database searched and no data found.	0
2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:	
Database searched and no data found.	O



0

#### 2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

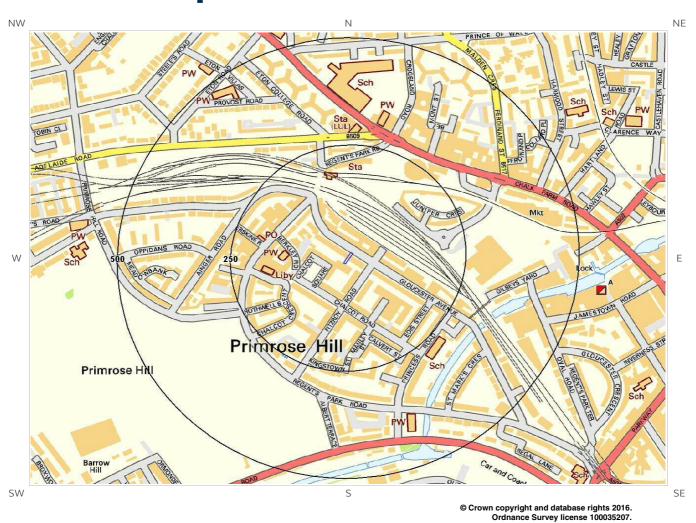
How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site?

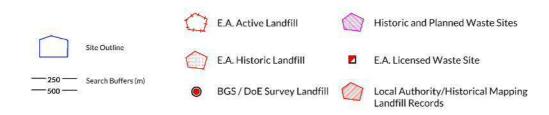
Database searched and no data found.

Report Reference: GS-2957178



# 3. Landfill and Other Waste Sites Map





Report Reference: GS-2957178



## 3. Landfill and Other Waste Sites

3.1 Landfill Sites	
3.1.1 Records from Environment Agency landfill data within 1000m of the study site:	
	0
Database searched and no data found.	
3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:	
	0
Database searched and no data found.	
3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:	
	0
Database searched and no data found.	
3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of t site:	he study
	0
Database searched and no data found.	
3.2 Other Waste Sites	
3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:	
	0
Database searched and no data found.	

Report Reference: GS-2957178



#### 3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

6

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details			
1A	556	E	528667 184035	Site Address: - Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAM003 EPR reference: EA/EPR/UP3697NB/S002 Operator: Camden London Borough Council Waste Management licence No: 80482 Annual Tonnage: 20000.0	Issue Date: 15/10/1994 Effective Date: - Modified: - Surrendered Date: 25/07/1997 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Jamestown Road CA Site Correspondence Address: -, -		
2A	556	E	528667 184035	Site Address: - Type: Household Waste Amenity Site Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: CAM003 EPR reference: - Operator: Camden London Borough Council Waste Management licence No: 80482 Annual Tonnage: 0.0	Issue Date: 15/10/1994 Effective Date: - Modified: - Surrendered Date: 25/07/1997 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Jamestown Road Ca Site Correspondence Address: Camden LB Council, Town Hall Extension, Argyle Street, London, WC1H 8EQ		
Not shown	1127	SW	527519 183131	Site Address: Regents Park Office, The Store Yard, Inner Circle, Regents Park, London, NW1 4NR Type: Composting Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROY003 EPR reference: EA/EPR/CB3106XV/A001 Operator: The Royal Parks Waste Management licence No: 401853 Annual Tonnage: 575.0	Issue Date: 24/02/2015 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Regents Park Leaf Yard Correspondence Address: -, -		
Not shown	1192	NE	528740 185138	Site Address: Camden London Borough Council, Recycling Centre, Regis Road, Kentish Town, London, NW5 3EP Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LWL001 EPR reference: EA/EPR/GB3230DW/T001 Operator: Londonwaste Limited Waste Management licence No: 80349 Annual Tonnage: 7793.0	Issue Date: 10/12/1996 Effective Date: 11/05/2012 Modified: 25/01/2002 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Regis Road Recycling Centre Correspondence Address: -, -		
Not shown	1192	NE	528740 185138	Site Address: Camden London Borough Council, Recycling Centre, Regis Road, Kentish Town, London, NW5 3EP Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LWL001 EPR reference: EA/EPR/GB3230DW/T001 Operator: LondonWaste Ltd Waste Management licence No: 80349 Annual Tonnage: 7793.0	Issue Date: 10/12/1996 Effective Date: 11/05/2012 Modified: 25/01/2002 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Regis Road Recycling Centre Correspondence Address: -, -		

Report Reference: GS-2957178

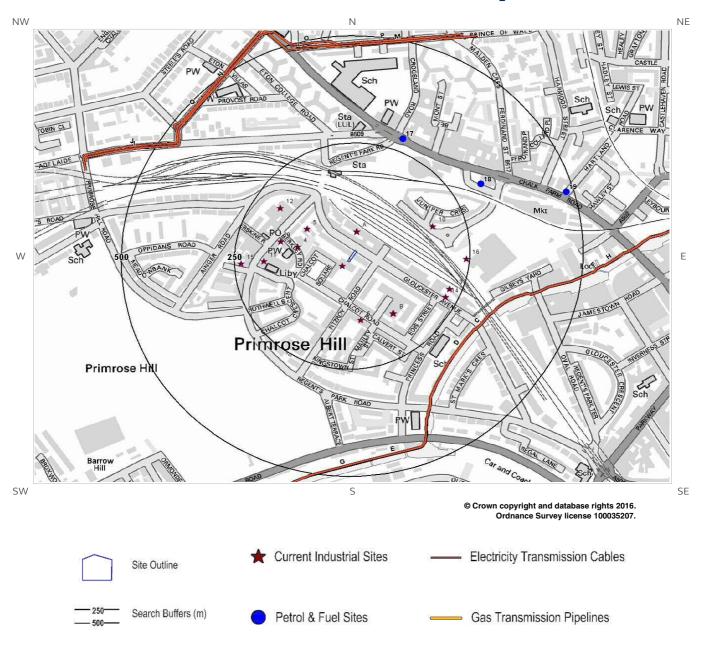


ID	Distance (m)	Direction	NGR	Det	tails
Not shown	1192	NE	528740 185138	Site Address: Camden London Borough Council, Recycling Centre, Regis Road, Kentish Town, London, NW5 3EP Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAM001 EPR reference: EA/EPR/DP3091NK/V003 Operator: Camden London Borough Council Waste Management licence No: 80349 Annual Tonnage: 7793.0	Issue Date: 10/12/1996 Effective Date: - Modified: 25/01/2002 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Regis Road Recycling Centre Correspondence Address: -, -

Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



## 4. Current Land Use Map



Report Reference: GS-2957178



## 4. Current Land Uses

#### **4.1 Current Industrial Data**

Records of potentially contaminative industrial sites within 250m of the study site:

16

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1	16	SW	Works	528086 184087	NW1	Unspecified Works Or Factories	Industrial Features
2A	44	N	Primose Hill Business Centre	528117 184167	110, Gloucester Avenue, London, NW1 8HX	Business Parks and Industrial Estates	Industrial Features
3A	44	N	Moixa Technology Ltd	528117 184167	110, Gloucester Avenue, London, NW1 8HX	Electronic Equipment	Industrial Products
4	115	W	Electricity Sub Station	527987 184132	NW1	Electrical Features	Infrastructure and Facilities
5	116	NW	Factory	528007 184174	NW1	Unspecified Works Or Factories	Industrial Features
6	138	S	Sew Much Fun	528126 183960	46, Chalcot Road, London, NW1 8LS	Textiles, Fabrics, Silk and Machinery	Industrial Products
7B	154	SE	Utopia Records Ltd	528198 183977	Utopia Village Chalcot Road, London, NW1 8LH	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
8B	154	SE	D Sound Recording	528197 183976	Unit 11 Utopia Village 7, Chalcot Road, London, NW1 8LH	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
9	155	W	Bottle Apostle	527949 184145	172, Regents Park Road, Primrose Hill, London, NW1 8XN	Hobby, Sports and Pastime Products	Consumer Products
10	177	Е	Electricity Sub Station	528285 184180	NW1	Electrical Features	Infrastructure and Facilities
11	185	W	Backyard Recordings	527911 184098	150, Regents Park Road, London, NW1 8XN	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
12	192	NW	Works	527948 184223	NW1	Unspecified Works Or Factories	Industrial Features
13	223	SE	Warehouse	528323 184034	NW1	Container and Storage	Transport, Storage and Delivery
14	223	SE	Warehouse	528314 184015	NW1	Container and Storage	Transport, Storage and Delivery
15	236	W	Andrew Moor Associates	527861 184092	14, Chamberlain Street, London, NW1 8XB	Glass	Industrial Products
16	243	Е	Electricity Sub Station	528360 184104	NW1	Electrical Features	Infrastructure and Facilities

Report Reference: GS-2957178



#### 4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

3

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Directio n	NGR	Company	Address	LPG	Status
17	281	N	528219 184384	Texaco	Star Chalk Farm, 81-85, Chalk Farm Road, Chalk Farm Road, Chalk Farm, London, Greater London, NW1 8AR	Not Applicable	Obsolete
18	316	NE	528392 184278	Morrisons	Morrisons Camden, Chalk Farm Road, Chalk Farm Road, Chalk Farm, London, Greater London, NW1 8AA	No	Open
19	482	E	528580 184260	Esso	Chalk Farm Service Station, 29-33, Chalk Farm Road, Chalk Farm Road, Chalk Farm, London, Greater London, NW1 8AJ	Not Applicable	Obsolete

#### 4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

30

The following Underground Electricity Transmission Cable records are represented as linear features on the Current Land Use map:

ID	Distanc e (m)	Direction	Details				
20C	312	SE	Cable Set: CITR4 - SJOW4 1 CABLE SECT 06 Cable Route: CITY ROAD - ST JOHNS WOOD 1 Cable Make: BICC OIL FILLED PB SHEATH 400KV CABLE	Cable Type: A/C Operating Voltage (kV): 400 Year of installation: 1982 Cable in tunnel: -			
21C	313	SE	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -			
22D	) 313 SE (		Cable Set: CITR4 - SJOW4 2 CABLE SECT 06 Cable Route: CITY ROAD - ST JOHNS WOOD 2 Cable Make: BICC OIL FILLED PB SHEATH 400KV CABLE	Cable Type: A/C Operating Voltage (kV): 400 Year of installation: 1982 Cable in tunnel: -			

Report Reference: GS-2957178



ID Distance (m)		Direction	Details			
23D	314	SE	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
24E	348	SE	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
25E	353	SE	Cable Set: CITR4 - SJOW4 1 CABLE SECT 05 Cable Route: CITY ROAD - ST JOHNS WOOD 1 Cable Make: BICC OIL FILLED PB SHEATH 400KV CABLE	Cable Type: A/C Operating Voltage (kV): 400 Year of installation: 1982 Cable in tunnel: -		
26F	377	E	Cable Set: CITR4 - SJOW4 2 CABLE SECT 07 Cable Route: CITY ROAD - ST JOHNS WOOD 2 Cable Make: BICC OIL FILLED PB SHEATH 400KV CABLE	Cable Type: A/C Operating Voltage (kV): 400 Year of installation: 1982 Cable in tunnel: -		
27F	387	E	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
28G	403	SE	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
29G	411	SE	Cable Set: CITR4 - SJOW4 2 CABLE SECT 05 Cable Route: CITY ROAD - ST JOHNS WOOD 2 Cable Make: BICC OIL FILLED PB SHEATH 400KV CABLE	Cable Type: A/C Operating Voltage (kV): 400 Year of installation: 1982 Cable in tunnel: -		
30H	449	E	Cable Set: CITR4 - SJOW4 1 CABLE SECT 07 Cable Route: CITY ROAD - ST JOHNS WOOD 1 Cable Make: BICC OIL FILLED PB SHEATH 400KV CABLE	Cable Type: A/C Operating Voltage (kV): 400 Year of installation: 1982 Cable in tunnel: -		
31H	460	E	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
321	461	NW	Cable Set: CABLE SECT 56 Cable Route: ST JOHNS WOOD - TOTTENHAM 2 Cable Make: BICC 275KV OIL FILLED PB SHEATH CABLE	Cable Type: A/C Operating Voltage (kV): 275 Year of installation: 1965 Cable in tunnel: -		
331	461	NW	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
34J	468	NW	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
35J	469	NW	Cable Set: CABLE SECT 56 Cable Route: ST JOHNS WOOD - TOTTENHAM 1 Cable Make: BICC 275KV OIL FILLED PB SHEATH CABLE	Cable Type: A/C Operating Voltage (kV): 275 Year of installation: 1965 Cable in tunnel: -		
36K	472	NW	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
37K	472	NW	Cable Set: CABLE SECT T3 Cable Route: ST JOHNS WOOD - TOTTENHAM 1 Cable Make: BICC 275KV (OIL) CABLE S/CORE AL SHEATH	Cable Type: A/C Operating Voltage (kV): 275 Year of installation: 2001 Cable in tunnel: Y		

Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



ID	Distanc e (m)	Direction	Details	
38L	478	N	Cable Set: CABLE SECT 54 Cable Route: ST JOHNS WOOD - TOTTENHAM 2 Cable Make: BICC 275KV OIL FILLED PB SHEATH CABLE	Cable Type: A/C Operating Voltage (kV): 275 Year of installation: 1965 Cable in tunnel: -
39L	478	N	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -
40M	480	Ν	Cable Set: CABLE SECT 53 Cable Route: ST JOHNS WOOD - TOTTENHAM 2 Cable Make: BICC 275KV OIL FILLED PB SHEATH CABLE	Cable Type: A/C Operating Voltage (kV): 275 Year of installation: 1965 Cable in tunnel: -
41N	481	NW	Cable Set: CABLE SECT 55 Cable Route: ST JOHNS WOOD - TOTTENHAM 2 Cable Make: BICC 275KV OIL FILLED PB SHEATH CABLE	Cable Type: A/C Operating Voltage (kV): 275 Year of installation: 1965 Cable in tunnel: -
12M	481	N	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -
43N	481	NW	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -
440	483	N	Cable Set: - Cable Route: - Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): - Year of installation: - Cable in tunnel: -
45P	483	N	Cable Set: - Cable Route: - Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): - Year of installation: - Cable in tunnel: -
460	483	N	Cable Set: - Cable Route: - Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): 275 Year of installation: - Cable in tunnel: -
47P	483	N	Cable Set: - Cable Route: - Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): 275 Year of installation: - Cable in tunnel: -
48Q	484	NW	Cable Set: - Cable Route: - Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): - Year of installation: - Cable in tunnel: -
49Q	484	NW	Cable Set: - Cable Route: - Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): 275 Year of installation: - Cable in tunnel: -

Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



#### 4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

Report Reference: GS-2957178



## 5. Geology

#### 5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

#### 5.2 Superficial Ground and Drift Geology

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

#### 5.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

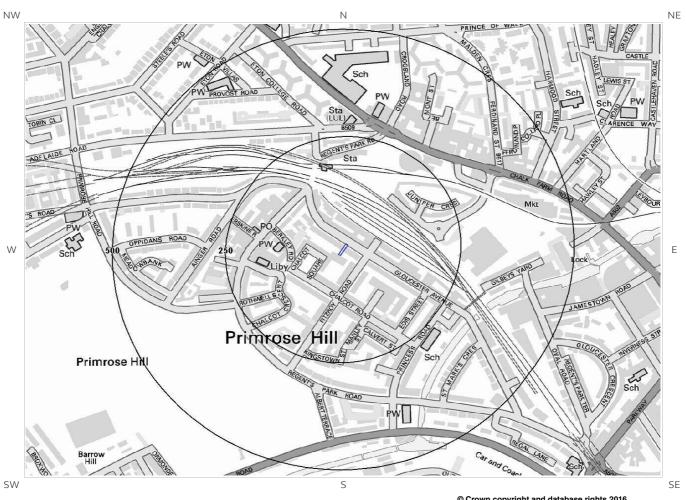
Lex Code	Description	Rock Type
LC-CLSISA	LONDON CLAY FORMATION	CLAY, SILT AND SAND

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

Report Reference: GS-2957178



## 6 Hydrogeology and Hydrology 6a. Aquifer Within Superficial Geology



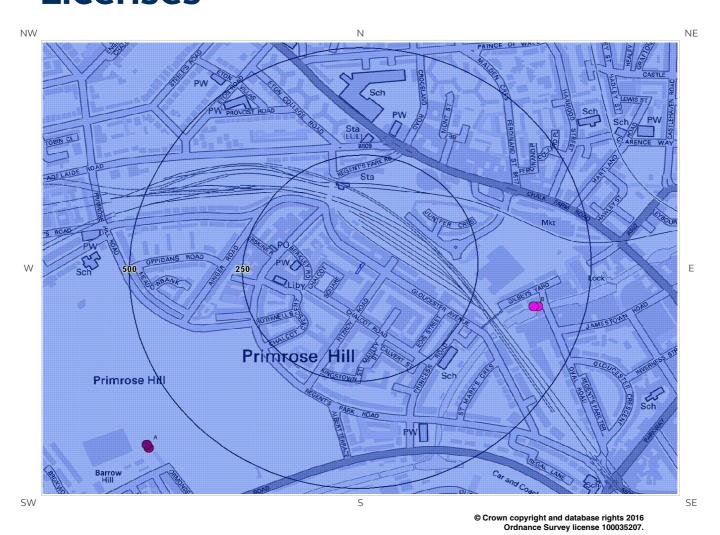
© Crown copyright and database rights 2016 Ordnance Survey license 100035207.



Report Reference: GS-2957178



## 6b. Aquifer Within Bedrock Geology and Abstraction Licenses

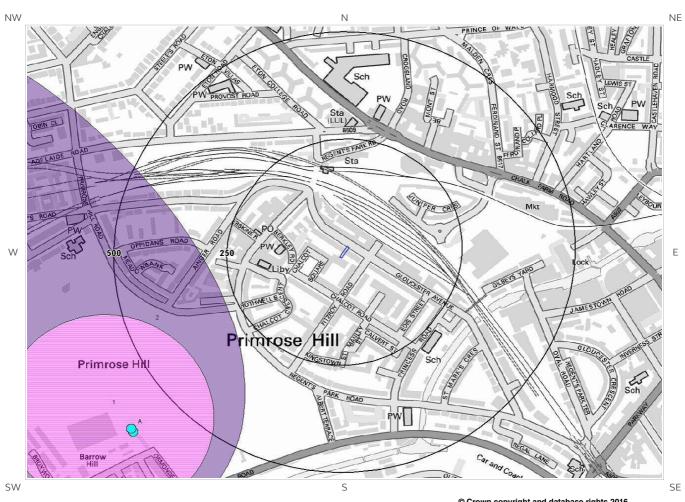


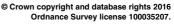


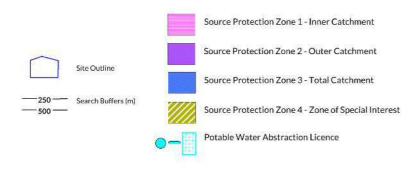
Report Reference: GS-2957178



## 6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



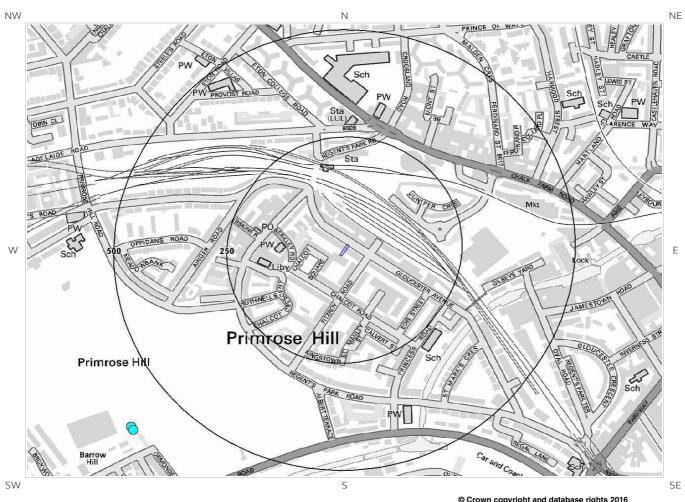


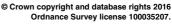


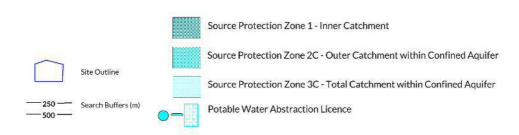
Report Reference: GS-2957178



# 6d. Hydrogeology – Source Protection Zones within confined aquifer



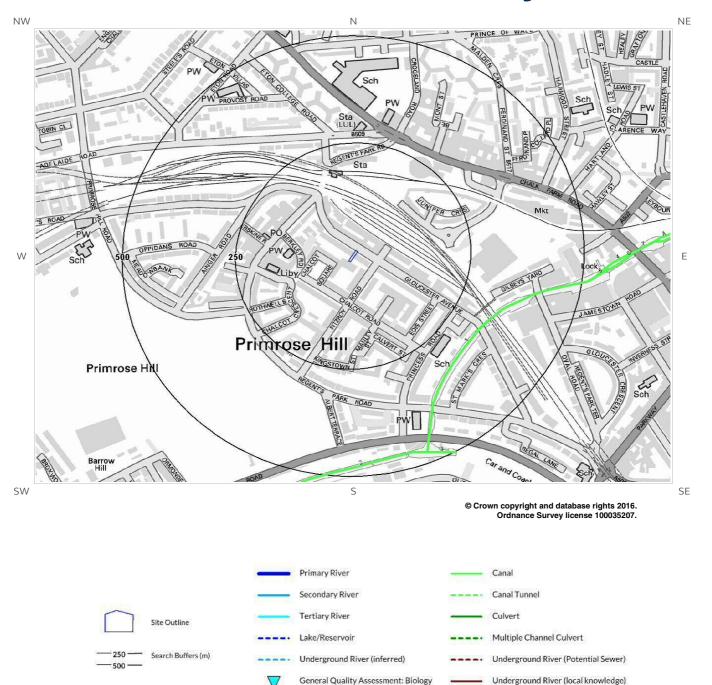




Report Reference: GS-2957178



## 6e. Hydrology – Detailed River Network and River Quality



General Quality Assessment: Chemistry

Report Reference: GS-2957178



## 6. Hydrogeology and Hydrology

#### **6.1 Aquifer within Superficial Deposits**

Are there records of strata classification within the superficial geology at or in proximity to the property?

Database searched and no data found.

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviroinsight User Guide.

#### **6.2 Aquifer within Bedrock Deposits**

Are there records of strata classification within the bedrock geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviroinsight User Guide.

The following aguifer records are shown on the Aguifer within Bedrock Geology Map (6b):

ID	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

#### **6.3 Groundwater Abstraction Licences**

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distanc e (m)	Direction	NGR	De	tails
3A	612	SW	527636 183697	Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Borehole At Barrow Hill Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: NPS/WR/009229 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 1/4/2013 Version End Date:

Report Reference: GS-2957178



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Deta	ails
4A	613	SW	527640 183690	Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Barrow Hill Pumping Station - Borehole Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: WRA/R/1026 Original Start Date: 1/4/2007 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 1/4/2007 Version End Date:
5A	613	SW	527640 183690	Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Barrow Hill Pumping Station - Borehole Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: WRA/2/2(24) Original Start Date: 26/9/2002 Expiry Date: 31/3/2007 Issue No: 1 Version Start Date: 26/9/2002 Version End Date:
Not shown	703	S	528000 183400	Status: Historical Licence No: 28/39/39/0035 Details: Animal Watering & General Use in non Farming situations Direct Source: Thames Groundwater Point: Borehole At Regent's Park, London Nw1 Data Type: Point Name: ZOOLOGICAL SOCIETY OF LONDON	Annual Volume (m³): 681.9  Max Daily Volume (m³): 59  Original Application No: -  Original Start Date: 4/4/1966  Expiry Date: -  Issue No: 100  Version Start Date: 4/4/1966  Version End Date:
Not shown	895	NE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Process Water Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 5/4/2012 Version End Date:
Not shown	895	NE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 5/4/2012 Version End Date:
Not shown	895	NE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Laundry Use Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 5/4/2012 Version End Date:
Not shown	895	NE	528800 184700	Status: Active Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LIMITED	Annual Volume (m³): 17997 Max Daily Volume (m³): 604.6 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/5/2012 Version End Date:

Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



					LOCATION INTELLIGENCE
ID	Distanc e (m)	Direction	NGR	Deta	ils
Not shown	895	NE	528800 184700	Status: Active Licence No: 28/39/39/0091 Details: Process Water Direct Source: Thames Groundwater Point: Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LIMITED	Annual Volume (m³): 17997 Max Daily Volume (m³): 604.6 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/5/2012 Version End Date:
Not shown	1310	W	526800 184280	Status: Historical Licence No: 28/39/39/0219 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Swiss Cottage Open Space- Borehole Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: WRA/N/1407 Original Start Date: 12/8/2005 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 1/4/2008 Version End Date:
Not shown	1357	W	526750 184261	Status: Active Licence No: TH/039/0039/087  Details: General Washing/Process Washing Direct Source: Thames Groundwater  Point: Swiss Cottage Open Space- Borehole Data Type: Point  Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: NPS/WR/014567 Original Start Date: 5/12/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 5/12/2013 Version End Date:
Not shown	1357	W	526750 184261	Status: Active Licence No: TH/039/0039/087 Details: Lake & Pond Throughflow Direct Source: Thames Groundwater Point: Swiss Cottage Open Space- Borehole Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: NPS/WR/014567 Original Start Date: 5/12/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 5/12/2013 Version End Date:
Not shown	1357	W	526750 184261	Status: Active Licence No: TH/039/0039/087 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Swiss Cottage Open Space- Borehole Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: NPS/WR/014567 Original Start Date: 5/12/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 5/12/2013 Version End Date:
Not shown	1626	SW	527420 182620	Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Two Boreholes At Abbey Lodge, Park Road, London Nw8 Data Type: Point Name: WOOD MANAGEMENT TRUSTEES LTD	Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 5/9/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/11/1991 Version End Date:
Not shown	1626	SW	527420 182620	Status: Active Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Abbey Lodge, Park Road, London Nw8- two Boreholes Data Type: Point Name: ABBEY LODGE RTM COMPANY LIMITED	Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 5/9/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/6/2006 Version End Date:

Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



ID	Distanc e (m)	Direction	NGR	Details		
Not shown	1804	E	529920 184040	Status: Historical Licence No: 28/39/39/0222 Details: General Use Relating To Secondary Category (High Loss) Direct Source: Thames Groundwater Point: Kings Cross Concrete Plant-borehole Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD	Annual Volume (m³): 55200 Max Daily Volume (m³): 200 Original Application No: GEN/39/ Original Start Date: 31/8/2006 Expiry Date: 31/3/2010 Issue No: 1 Version Start Date: 31/8/2006 Version End Date:	
Not shown	1804	E	529920 184040	Status: Active Licence No: TH/039/0039/027 Details: General Use Relating To Secondary Category (High Loss) Direct Source: Thames Groundwater Point: Kings Cross Concrete Plant-borehole Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD	Annual Volume (m³): 33400 Max Daily Volume (m³): 200 Original Application No: NPS/WR/011609 Original Start Date: 21/4/2010 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 13/8/2012 Version End Date:	
Not shown	1898	S	528407 182223	Status: Active Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: Thames Groundwater Point: Doric Villa, York Terrace East, London Data Type: Point Name: Ritblat	Annual Volume (m³): 118260 Max Daily Volume (m³): 324 Original Application No: NPS/WR/002585 Original Start Date: 26/2/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 26/2/2010 Version End Date:	
Not shown	1898	S	528407 182223	Status: Historical Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: Thames Groundwater Point: Confined Chalk, Doric Villa, York Terrace East, London Data Type: Point Name: Ritblat	Annual Volume (m³): 118260 Max Daily Volume (m³): 324 Original Application No: NPS/WR/002585 Original Start Date: 26/2/2010 Expiry Date: 31/3/2019 Issue No: 1 Version Start Date: 26/2/2010 Version End Date:	

#### **6.4 Surface Water Abstraction Licences**

Are there any Surface Water Abstraction Licences within 2000m of the study site?

Yes

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details	
22B	385	E	528490 184020	Status: Historical Licence No: 28/39/39/0173 Details: Non-Evaporative Cooling Direct Source: Thames Surface Water - Non Tidal Point: Oval Road, Camden - Grand Union Regents Canal Data Type: Point Name: BRITISH WATERWAYS BOARD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 8/12/1994 Expiry Date: - Issue No: 100 Version Start Date: 8/12/1994 Version End Date:
23B	395	E	528500 184020	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: Thames Surface Water - Non Tidal Point: Southampton Bridge, London, Nw8 - Regents Canal Data Type: Point Name: Canal and River Trust	Annual Volume (m³): 7010000 Max Daily Volume (m³): 19520 Application No: - Original Start Date: 18/7/1980 Expiry Date: - Issue No: 101 Version Start Date: 17/12/2007 Version End Date:

Report Reference: GS-2957178



ID	Distance (m)	Direction	NGR	Details	
Not shown	1713	E	529750 183600	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: Thames Surface Water - Non Tidal Point: Grand Union Canal At Camley Street Nature Park, London Data Type: Point Name: BRITISH WATERWAYS BOARD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 18/9/1991 Expiry Date: - Issue No: 100 Version Start Date: 18/9/1991 Version End Date:
Not shown	1713	E	529750 183600	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: Thames Surface Water - Non Tidal Point: Camley Street Nature Park, London Data Type: Point Name: BRITISH WATERWAYS BOARD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 18/9/1991 Version End Date:
Not shown	1945	SW	527050 182460	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: Thames Surface Water - Non Tidal Point: St John's Wood, London - Regents Canal Data Type: Point Name: Canal and River Trust	Annual Volume (m³): 7010000  Max Daily Volume (m³): 19520  Application No: - Original Start Date: 18/7/1980  Expiry Date: - Issue No: 101  Version Start Date: 17/12/2007  Version End Date:

#### **6.5 Potable Water Abstraction Licences**

Are there any Potable Water Abstraction Licences within 2000m of the study site?

Yes

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distanc e (m)	Direction	NGR	Details			
3A	612	SW	527636 183697	Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Borehole At Barrow Hill Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: NPS/WR/009229 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: Version End Date:		
4A	613	SW	527640 183690	Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Barrow Hill Pumping Station - Borehole Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: WRA/2/2(24) Original Start Date: 26/9/2002 Expiry Date: 31/3/2007 Issue No: 1 Version Start Date: Version End Date:		
5A	613	SW	527640 183690	Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: Thames Groundwater Point: Barrow Hill Pumping Station - Borehole Data Type: Point Name: THAMES WATER UTILITIES LTD	Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: WRA/R/1026 Original Start Date: 1/4/2007 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: Version End Date:		

Report Reference: GS-2957178



ID	Distanc e (m)	Direction	NGR	Deta	ils
Not shown	895	NE	528800 184700	Status: Active Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LIMITED	Annual Volume (m³): 17997 Max Daily Volume (m³): 604.6 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	895	NE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1626	SW	527420 182620	Status: Active Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Abbey Lodge, Park Road, London Nw8- two Boreholes Data Type: Point Name: ABBEY LODGE RTM COMPANY LIMITED	Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 5/9/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1626	SW	527420 182620	Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Thames Groundwater Point: Two Boreholes At Abbey Lodge, Park Road, London Nw8 Data Type: Point Name: WOOD MANAGEMENT TRUSTEES LTD	Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 5/9/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:

#### **6.6 Source Protection Zones**

Are there any Source Protection Zones within 500m of the study site?

Yes

The following Source Protection Zones records are represented on the SPZ and Potable Water Abstraction Map (6c):

ID	Distanc e (m)	Direction	Zone	Description
2	275	W	2	Outer catchment
1	401	SW	1	Inner catchment

Report Reference: GS-2957178



#### 6.7 Source Protection Zones within Confined Aguifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

#### 6.8 Groundwater Vulnerability and Soil Leaching Potential

Is there any Environment Agency information on groundwater vulnerability and soil leaching potential within 500m of the study site?

Database searched and no data found.

#### 6.9 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site?

Yes

#### 6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distanc e (m)	Direction	NGR	River Quality Grade –	Biological Quality Grade				
ID		Direction			2005	2006	2007	2008	2009
Not shown	1032	Е	529150 184100	River Name: Grand Union Canal (paddington Arm) Reach: Canal Feeder - Camden Road End/Start of Stretch: End of Stretch NGR	F	F	F	F	E

#### 6.9.2 Chemical Quality:

Database searched and no data found.

Report Reference: GS-2957178



#### **6.10 Detailed River Network**

Are there any Detailed River Network entries within 500m of the study site?

Yes

The following Detailed River Network records are represented on the Hydrology Map (6e):

ID	Distanc e (m)	Direction	Details	;
1	321	SE	River Name: Grand Union Canal Regent's Canal Welsh River Name: - Alternative Name: -	River Type: Canal Main River Status: Currently Undefined
2	463	S	River Name: Grand Union Canal Regent's Canal Welsh River Name: - Alternative Name: -	River Type: Canal Main River Status: Currently Undefined
3	475	S	River Name: Cumberland Basin Welsh River Name: - Alternative Name: -	River Type: Canal Main River Status: Currently Undefined

#### **6.11 Surface Water Features**

Are there any surface water features within 250m of the study site?

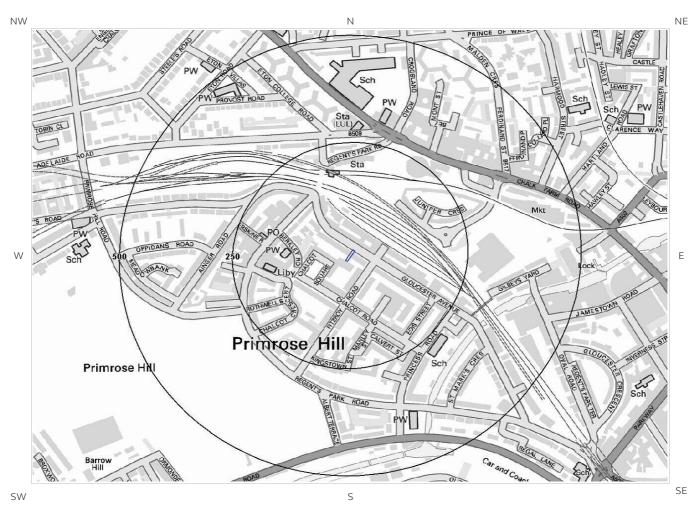
No

Database searched and no data found.

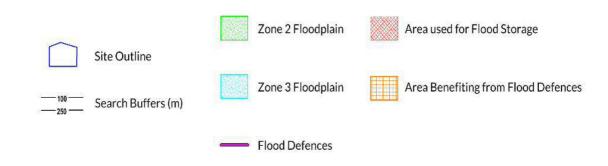
Report Reference: GS-2957178



## 7a. Environment Agency Flood Map for Planning (from rivers and the sea)



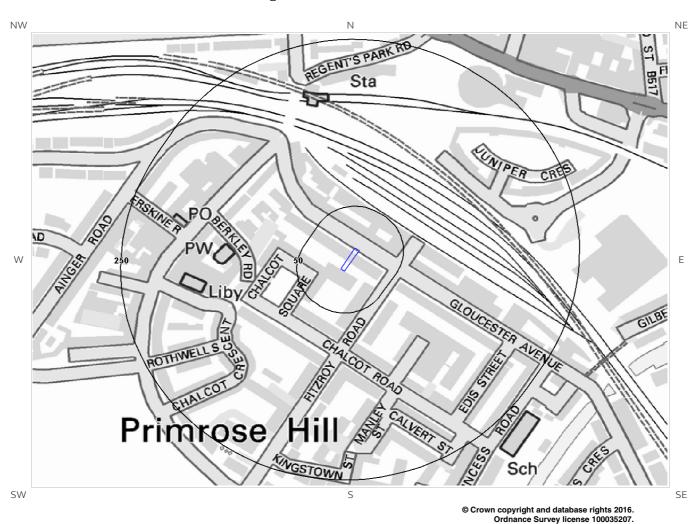
© Crown copyright and database rights 2016. Ordnance Survey license 100035207.

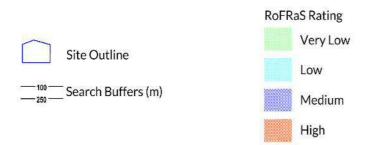


Report Reference: GS-2957178



# 7b. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map





Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



## 7 Flooding

#### 7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain?

No

Environment Agency Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

#### 7.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency Zone 3 floodplain?

No

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

#### 7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

What is the highest risk of flooding onsite?

Very Low

The Environment Agency RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

#### 7.4 Flood Defences

Are there any Flood Defences within 250m of the study site?

Database searched and no data found.

No

#### 7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site?

No

Report Reference: GS-2957178



#### 7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

#### 7.7 Groundwater Flooding Susceptibility Areas

7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site?

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Not Prone

The area is not considered to be prone to groundwater flooding based on rock type.

#### 7.8 Groundwater Flooding Confidence Areas

What is the British Geological Survey confidence rating in this result?

Not Applicable

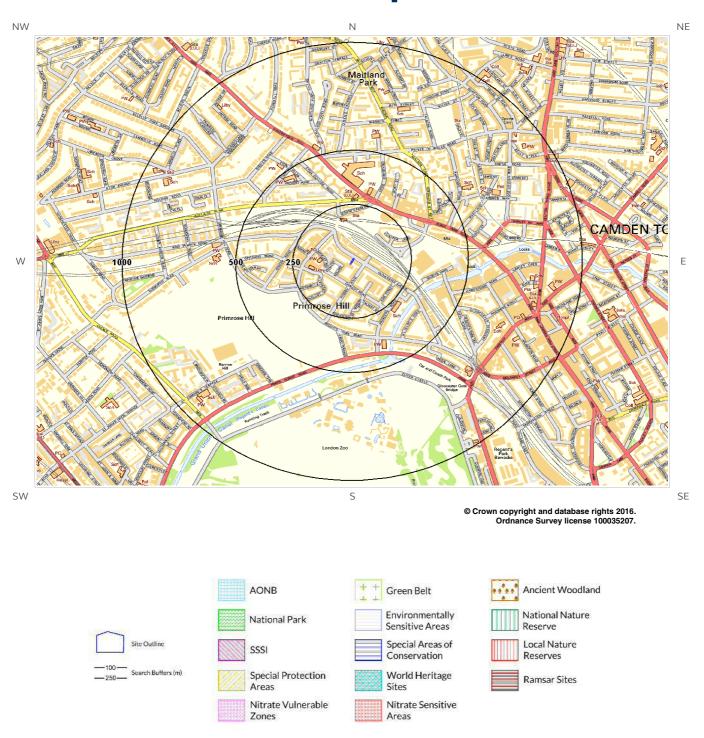
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

Report Reference: GS-2957178



# 8. Designated Environmentally Sensitive Sites Map



Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue

ince. 50 i i5\_i i5\_diodeestei\_i Weilde



## 8. Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site?	Yes
8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:	
	С
Database searched and no data found.	
8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:	
	С
Database searched and no data found.	
8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site	:
	C
Database searched and no data found.	
8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:	
	C
Database searched and no data found.	
8.5 Records of Ramsar sites within 2000m of the study site:	
	С
Database searched and no data found.	

Report Reference: GS-2957178



#### 8.6 Records of Ancient Woodland within 2000m of the study site:

			Database searched and no data found.	0
8.7	Record	ls of Loc	al Nature Reserves (LNR) within 2000m of the study site:	
The	fallouin	or Local Nig	of Local Nature Reserves (LNR) within 2000m of the study site:  3  Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales das polygons on the Designated Environmentally Sensitive Sites Map:	
		_		vvales
ID	Distance (m)	Direction	LNR Name Data Source	<b>9</b>
Not hown	1252	NW	Belsize Wood Natural Engla	nd
Not hown	1450	SW	St John's Wood Church Grounds Natural Engla	nd
Not hown	1882	E	Camley Street Nature Park Natural Engla	nd
8.9	Record	ls of Env		
			Database searched and no data found.	Ü
	0 Reco		eas of Outstanding Natural Beauty (AONB) within 2000m of the	
	_		Database searched and no data found.	0
8.1	1 Reco	rds of Na	ational Parks (NP) within 2000m of the study site:	0

Database searched and no data found.

Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



#### 8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

	Database searched and no data found.	
.13 Records of Ni	rate Vulnerable Zones within 2000m of the study site	e:
	Database searched and no data found.	
.14 Records of Gr	een Belt land within 2000m of the study site:	
	Database searched and no data found.	

Report Reference: GS-2957178 Client Reference: 30143\_143\_Gloucester\_Avenue



## 9. Natural Hazards Findings

#### 9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure GeoInsight**, available from **our website**. The following information has been found:

#### 9.1.1 Shrink Swell

What is the maximum Shrink-Swell\*\* hazard rating identified on the study site?

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

#### Hazard

Ground conditions predominantly high plasticity. Do not plant or remove trees or shrubs near to buildings without expert advice about their effect and management. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a probable increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a probable increase in insurance risk during droughts or where vegetation with high moisture demands is present.

#### 9.1.2 Landslides

What is the maximum Landslide\* hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

#### Hazard

Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

#### 9.1.3 Soluble Rocks

What is the maximum Soluble Rocks\* hazard rating identified on the study site?

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

#### Hazard

Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

Report Reference: GS-2957178

<sup>\*</sup> This indicates an automatically generated 50m buffer and site.



#### 9.1.4 Compressible Ground

What is the maximum Compressible Ground\* hazard rating identified on the study site?

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

#### Hazard

No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

#### 9.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks\* hazard rating identified on the study site?

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

#### Hazard

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

#### 9.1.6 Running Sand

What is the maximum Running Sand\*\* hazard rating identified on the study site?

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

#### Hazard

No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

#### 9.2 Radon

#### 9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

Report Reference: GS-2957178

Client Reference: 30143\_143\_Gloucester\_Avenue

59

<sup>\*</sup> This indicates an automatically generated 50m buffer and site.



#### 9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment?

No radon protective measures are necessary.

Report Reference: GS-2957178



## 10. Mining

#### 10.1 Coal Mining

Are there any coal mining areas within 75m of the study site?

No

Database searched and no data found.

#### 10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary?

No

Database searched and no data found.

#### **10.3 Brine Affected Areas**

Are there any brine affected areas within 75m of the study site? Guidance: No Guidance Required.

No

Report Reference: GS-2957178



### **Contact Details**

#### Groundsure Helpline

Telephone: 08444 159 000 info@groundsure.com



**Geological Survey** 

Environment

NATURAL ENVIRONMENT RESEARCH COUNCIL

**British** 

#### **British Geological Survey Enquiries**

Kingsley Dunham Centre Keyworth, Nottingham NG12 5GG Tel: 0115 936 3143. Fax: 0115 936 3276. Email:

#### Web:www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:

#### enquiries@bgs.ac.uk

#### **Environment Agency**

National Customer Contact Centre, PO Box 544 Rotherham, S60 1BY Tel: 08708 506 506

Web:www.environment-agency.gov.uk
Email:enquiries@environment-agency.gov.uk

#### **Public Health England**

Public information access office Public Health England, Wellington House 133-155 Waterloo Road, London, SE1 8UG www.gov.uk/phe

Email:enquiries@phe.gov.uk
Main switchboard: 020 7654 8000



## Public Health England

#### The Coal Authority

200 Lichfield Lane Mansfield Notts NG18 4RG Tel: 0345 7626 848 DX 716176 Mansfield 5

www.coal.gov.uk



#### Ordnance Survey

Adanac Drive, Southampton SO16 0AS Tel: 08456 050505



#### **Local Authority**

Authority: London Borough of Camden Phone: 020 7974 4444 Web: http://www.camden.gov.uk/ Address: Camden Town Hall, Judd Street, London, WC1H 9JE

#### **Gemapping PLC**

Virginia Villas, High Street, Hartley Witney, Hampshire RG27 8NW Tel: 01252 845444



Report Reference: GS-2957178



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England who retain the Copyright and Intellectual Property Rights for the data.

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028]. This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

Report Reference: GS-2957178

#### **Standard Terms and Conditions**

#### 1 Definitions

In these terms and conditions unless the context otherwise requires:

"Beneficiary" means the person or entity for whose benefit the Client has obtained the Services.

"Client" means the party or parties entering into a Contract with Groundsure.

"Commercial" means any building or property which is not Residential.

"Confidential Information" means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

(i) information which the Client can prove was rightfully in its possession prior to disclosure by Groundsure and

(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

**"Support Services"** means Support Services provided by Groundsure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.

**"Contract"** means the contract between Groundsure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.

"Third Party Data Provider" means any third party providing Third Party Content to Groundsure.

"Data Reports" means reports comprising factual data with no accompanying interpretation.

"Fees" has the meaning set out in clause 5.1.

"Groundsure" means Groundsure Limited, a company registered in England and Wales under number 03421028.

**"Groundsure Materials"** means all materials prepared by Groundsure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.

"Intellectual Property" means any patent, copyright, design rights, trade or service mark, moral rights, data protection rights, know-how or trade mark in each case whether registered or not and including applications for the same or any other rights of a similar nature anywhere in the world.

"Mapping" means a map, map data or a combination of historical maps of various ages, time periods and scales.

"Order" means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.

"Ordnance Survey" means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 OAS, UK.

**"Order Website"** means the online platform through which Orders may be placed by the Client and accepted by Groundsure.

**"Report"** means a Risk Screening Report or Data Report for Commercial or Residential property.

"Residential" means any building or property used as or intended to be used as a single dwelling.

"Risk Screening Report" means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.

**"Services"** means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6

"Site" means the area of land in respect of which the Client has requested Groundsure to provide the Services.

**"Third Party Content"** means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.

"User Guide" means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

#### 2 Scope of Services, terms and conditions, requests for insurance and quotations

- 2.1 Groundsure agrees to provide the Services in accordance with the Contract.
- $2.2\ \mbox{Groundsure}$  shall exercise reasonable skill and care in the provision of the Services.
- 2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

- 2.4 The Client acknowledges that terms and conditions appearing on a Client's order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.
- 2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.
- 2.6 Groundsure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure. Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure's acceptance of an Order shall be binding only when made in writing and signed by Groundsure's authorised representative or when accepted through the Order Website

#### 3 The Client's obligations

3.1The Client shall comply with the terms of this Contract and

- (i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and
- (ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary's needs.

3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client's approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

#### 4 Reliance

4.1The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

(i) the Beneficiary,

(ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),

(iv) the first purchaser or first tenant of the Site, and

(v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

#### 5 Fees and Disbursements

5.1Groundsure shall charge and the Client shall pay fees at the rate and

frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by Groundsure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together "Fees").

- 5.2 The Client shall pay all outstanding Fees to Groundsure in full without deduction, counterclaim or set off within 30 days of the date of Groundsure's invoice or such other period as may be agreed in writing between Groundsure and the Client ("Payment Date"). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.
- 5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of Groundsure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

#### 6 Intellectual Property and Confidentiality

#### 6.1 Subject to

- (i) full payment of all relevant Fees and
- (ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the Groundsure Materials.
- 6.2 All Intellectual Property in the Groundsure Materials are and shall remain owned by Groundsure or Groundsure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.
- 6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.
- 6.4 The Client shall, and shall procure that any recipients of the Groundsure Materials shall:
- (i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to Groundsure or any third party from the Services;
- (ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;
- (iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);
- (iv) not combine the Services with or incorporate such Services into any other information data or service;
- (v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);
- (vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and
- (vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,
- 6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the Groundsure Materials in order to advise the Beneficiary in a professional capacity. However, Groundsure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.
- 6.6 The Client shall procure that any person to whom the Services are made available shall notify Groundsure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

#### 7.Liability: Particular Attention Should Be Paid To This

- 7.1 This Clause 7 sets out the entire liability of Groundsure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:
  - (i) any breach of contract, including any deliberate breach of the Contract by Groundsure or its employees, agents or

subcontractors;

- (ii)  $\,$  any use made of the Reports, Services, Materials or any part of them; and
- (iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.
- 7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.
- 7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.
- 7.4 Groundsure shall not be liable for
  - (i) loss of profits;
  - (ii) loss of business;
  - (iii) depletion of goodwill and/or similar losses;
  - (iv) loss of anticipated savings;
  - (v) loss of goods;
  - (vi) loss of contract;
  - (vii) loss of use;
  - (viii) loss or corruption of data or information;
  - (ix) business interruption;
- (x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;
- (xi) loss or damage that arise as a result of the use of all or part of the Groundsure Materials in breach of the Contract;
- (xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the Groundsure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;
- $\mbox{(\sc xiii)}$  loss or damage to a computer, software, modem, telephone or other property; and
- (xiv) loss or damage caused by a delay or loss of use of Groundsure's internet ordering service.
- 7.5 Groundsure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.
- 7.6 Groundsure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of Groundsure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against Groundsure in relation to the Services or other matters arising pursuant to the Contract.

#### 8 Groundsure's right to suspend or terminate

- 8.1 If Groundsure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, Groundsure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.
- 8.2 Groundsure shall be entitled to terminate the Contract immediately on written notice in the event that:
- (i) the Client fails to pay any sum due to Groundsure within 30 days of the Payment Date; or
- (ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved;
- (iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or
- (iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

#### 9. Client's Right to Terminate and Suspend

- 9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.
- 9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

- (i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon Groundsure's acceptance of the Order; and
- (ii) the Reports and/or Mapping provided under this Contract are
  - (a) supplied to the Client's specification(s) and in any event  $% \left( x\right) =\left( x\right) +\left( x\right) +\left($
  - (b) by their nature cannot be returned.

#### 10 Consequences of Withdrawal, Termination or Suspension

- 10.1 Upon termination of the Contract:
- (i) Groundsure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in Groundsure's possession or control; and
- (ii) the Client shall pay to Groundsure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay Groundsure any additional costs incurred in relation to the termination or suspension of the Contract.

#### 11 Anti-Bribery

- 11.1 The Client warrants that it shall:
- (i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery  $Act\ 2010$ ;
- (ii) comply with such of Groundsure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and
- (iii) promptly report to Groundsure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.
- 11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

#### 12 General

- 12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.
- 12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through Groundsure.
- 12.3 Groundsure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of Groundsure.
- 12.4 No failure on the part of Groundsure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.
- 12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.
- 12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.
- 12.7 Groundsure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:
- (i) the Client or Beneficiary's failure to provide facilities, access or information:
  - (ii) fire, storm, flood, tempest or epidemic;
  - (iii) Acts of God or the public enemy;
  - (iv) riot, civil commotion or war;
  - (v) strikes, labour disputes or industrial action;
  - (vi) acts or regulations of any governmental or other agency;
- (vii) suspension or delay of services at public registries by Third Party Data Providers;
  - (viii) changes in law; or
  - (ix) any other reason beyond Groundsure's reasonable control.

In the event that Groundsure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then Groundsure shall be entitled to terminate this Contract immediately on written notice to the Client.

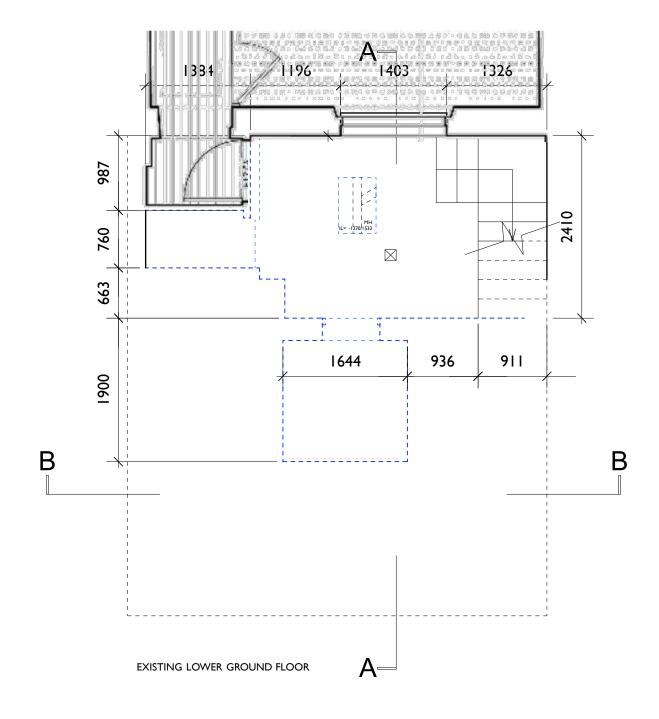
- 12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.
- 12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.
- 12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.
- 12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.
- 12.12 This Contract shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.
- 12.13 Groundsure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.
- 12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at Groundsure who will respond in a timely manner. In the event you are not satisfied with Groundsure's complaints handling process or you are unable to resolve the complaint, at your discretion you may refer the complaint to The Property Ombudsman Scheme at the following URL/email: website www.tpos.co.uk or email: admin@tpos.co.uk
- 12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law. © Groundsure Limited June 2013

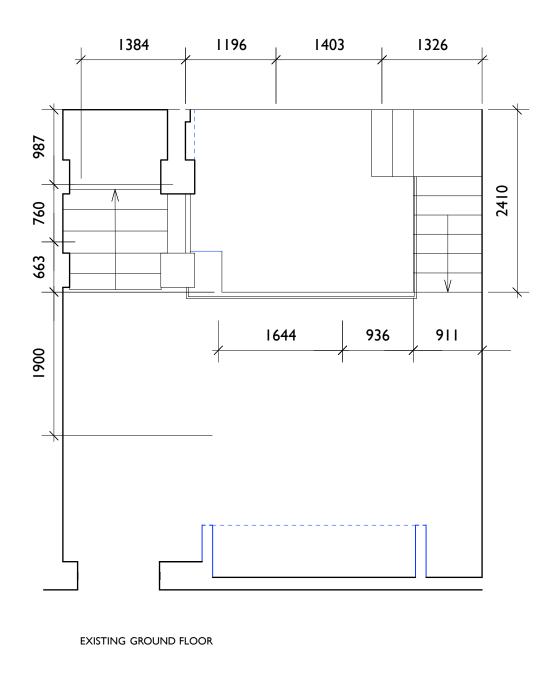
### **APPENDIX B**

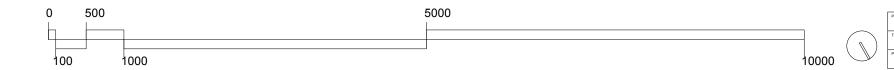
**Site Plans** 

Do not scale from this drawing.

se only figured dimensions







143A GLOUCESTER AVENUE						
EXISTING LOWER GROUND & GROUND FLOOR PLANS						
PROJECT NO 1311	L(-02)100	1:50@A1	NOV'13	SURVEY	LM	

