APPENDIX E

GroundSure Enviro and Geo Insight Report

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

22, LAWN ROAD, LONDON, NW3 2XR

Order Details

Date: 01/10/2021

Your ref: 8229_-_22_Lawn_Road

Our Ref: CGL-8229803

Client: Card Geotechnics Ltd (CGL)

Site Details

Location: 527565 185246

Area: 0.02 ha

Authority: London Borough of Camden

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

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	1	4	30	51	-
18	1.2	Historical tanks	0	0	6	7	-
19	1.3	Historical energy features	0	0	9	19	-
20	1.4	Historical petrol stations	0	0	0	0	-
20	1.5	Historical garages	0	0	0	16	-
21	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
22	2.1	Historical industrial land uses	4	7	37	63	-
27	2.2	Historical tanks	0	0	16	10	-
28	2.3	Historical energy features	0	0	21	69	-
31	2.4	Historical petrol stations	0	0	0	0	-
32	2.5	Historical garages	0	0	0	37	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
34	3.1	Active or recent landfill	0	0	0	0	-
34	3.2	Historical landfill (BGS records)	0	0	0	0	-
35	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
35	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
35	3.5	Historical waste sites	0	0	9	0	-
36	3.6	Licensed waste sites	0	0	0	0	-
37	3.7	Waste exemptions	0	0	2	13	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
39	4.1	Recent industrial land uses	0	0	13	-	-
40	4.2	Current or recent petrol stations	0	0	0	1	-
41	4.3	Electricity cables	0	0	0	0	-
41	4.4	Gas pipelines	0	0	0	0	-
41	4.5	Sites determined as Contaminated Land	0	0	0	0	-

41	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
41	4.7	Regulated explosive sites	0	0	0	0	-
42	4.8	Hazardous substance storage/usage	0	0	0	0	-
42	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
42	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
42	**4.11**	**Licensed pollutant release (Part A(2)/B)**	0	0	2	8	-
43	**4.12**	**Radioactive Substance Authorisations**	0	0	0	38	-
49	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
49	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
49	4.15	Pollutant release to public sewer	0	0	0	0	-
50	4.16	List 1 Dangerous Substances	0	0	0	0	-
50	4.17	List 2 Dangerous Substances	0	0	0	0	-
50	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	0	1	-
50	4.19	Pollution inventory substances	0	0	0	0	-
51	4.20	Pollution inventory waste transfers	0	0	0	0	-
51	**4.21**	**Pollution inventory radioactive waste**	0	0	0	2	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
53	5.1	Superficial aquifer	None (within 500m)				
54	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
55	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
56	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
56	5.5	Groundwater vulnerability- local information	None (within 0m)				
57	**5.6**	**Groundwater abstractions**	0	0	0	0	13
60	**5.7**	**Surface water abstractions**	0	0	0	0	2
61	**5.8**	**Potable abstractions**	0	0	0	0	5
63	5.9	Source Protection Zones	0	0	0	0	-
63	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
64	6.1	Water Network (OS MasterMap)	0	0	0	-	-

64	6.2	Surface water features	0	0	0	-	-
65	**6.3**	**WFD Surface water body catchments**	1	-	-	-	-
65	6.4	WFD Surface water bodies	0	0	0	-	-
65	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
66	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
66	7.2	Historical Flood Events	0	0	0	-	-
66	7.3	Flood Defences	0	0	0	-	-
67	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
67	7.5	Flood Storage Areas	0	0	0	-	-
68	7.6	Flood Zone 2	None (within 50m)				
68	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
69	**8.1**	**Surface water flooding**	1 in 100 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
71	**9.1**	**Groundwater flooding**	Negligible (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
72	**10.1**	**Sites of Special Scientific Interest (SSSI)**	0	0	0	0	1
73	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
73	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
73	10.4	Special Protection Areas (SPA)	0	0	0	0	0
73	10.5	National Nature Reserves (NNR)	0	0	0	0	0
74	**10.6**	**Local Nature Reserves (LNR)**	0	1	0	0	1
74	**10.7**	**Designated Ancient Woodland**	0	0	0	0	2
74	10.8	Biosphere Reserves	0	0	0	0	0
75	10.9	Forest Parks	0	0	0	0	0
75	10.10	Marine Conservation Zones	0	0	0	0	0
75	10.11	Green Belt	0	0	0	0	0
75	10.12	Proposed Ramsar sites	0	0	0	0	0

75	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
76	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
76	10.15	Nitrate Sensitive Areas	0	0	0	0	0
76	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
77	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
78	**10.18**	**SSSI Units**	0	0	0	0	2
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
80	11.1	World Heritage Sites	0	0	0	-	-
81	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
81	11.3	National Parks	0	0	0	-	-
81	**11.4**	**Listed Buildings**	0	1	4	-	-
82	**11.5**	**Conservation Areas**	1	0	1	-	-
82	11.6	Scheduled Ancient Monuments	0	0	0	-	-
83	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
84	**12.1**	**Agricultural Land Classification**	Urban (within 250m)				
85	12.2	Open Access Land	0	0	0	-	-
85	12.3	Tree Felling Licences	0	0	0	-	-
85	12.4	Environmental Stewardship Schemes	0	0	0	-	-
85	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
86	**13.1**	**Priority Habitat Inventory**	0	1	4	-	-
87	13.2	Habitat Networks	0	0	0	-	-
87	13.3	Open Mosaic Habitat	0	0	0	-	-
87	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
88	**14.1**	**10k Availability**	Identified (within 500m)				
89	14.2	Artificial and made ground (10k)	0	0	0	0	-
90	14.3	Superficial geology (10k)	0	0	0	0	-

90	14.4	Landslip (10k)	0	0	0	0	-
91	**14.5**	**Bedrock geology (10k)**	1	0	1	0	-
92	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
93	**15.1**	**50k Availability**	Identified (within 500m)				
94	15.2	Artificial and made ground (50k)	0	0	0	0	-
94	15.3	Artificial ground permeability (50k)	0	0	-	-	-
95	15.4	Superficial geology (50k)	0	0	0	0	-
95	15.5	Superficial permeability (50k)	None (within 50m)				
95	15.6	Landslip (50k)	0	0	0	0	-
95	15.7	Landslip permeability (50k)	None (within 50m)				
96	**15.8**	**Bedrock geology (50k)**	1	0	0	0	-
97	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
97	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
98	**16.1**	**BGS Boreholes**	0	0	3	-	-
Page	Section	Natural ground subsidence					
100	**17.1**	**Shrink swell clays**	Moderate (within 50m)				
101	**17.2**	**Running sands**	Very low (within 50m)				
102	**17.3**	**Compressible deposits**	Negligible (within 50m)				
103	**17.4**	**Collapsible deposits**	Very low (within 50m)				
104	**17.5**	**Landslides**	Very low (within 50m)				
105	**17.6**	**Ground dissolution of soluble rocks**	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
107	18.1	Natural cavities	0	0	0	0	-
108	18.2	BritPits	0	0	0	0	-
108	**18.3**	**Surface ground workings**	0	0	1	-	-
108	**18.4**	**Underground workings**	4	4	4	6	37
110	18.5	Historical Mineral Planning Areas	0	0	0	0	-

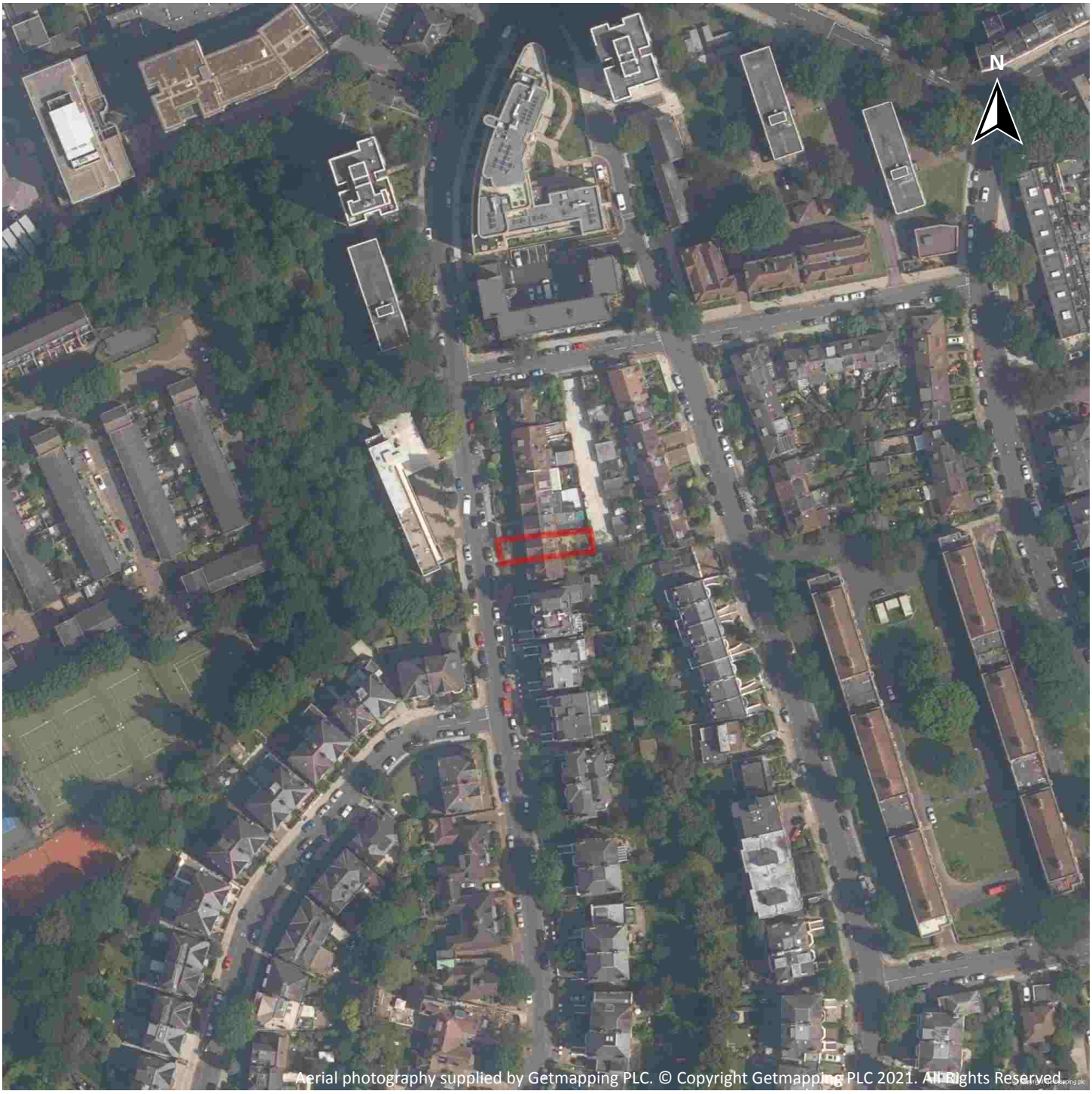
111	18.6	Non-coal mining	0	0	0	0	0
111	18.7	Mining cavities	0	0	0	0	0
111	18.8	JPB mining areas	None (within 0m)				
111	18.9	Coal mining	None (within 0m)				
111	18.10	Brine areas	None (within 0m)				
112	18.11	Gypsum areas	None (within 0m)				
112	18.12	Tin mining	None (within 0m)				
112	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
113	**19.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
114	**20.1**	**BGS Estimated Background Soil Chemistry**	1	0	-	-	-
114	**20.2**	**BGS Estimated Urban Soil Chemistry**	1	4	-	-	-
115	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
116	**21.1**	**Underground railways (London)**	0	0	1	-	-
117	21.2	Underground railways (Non-London)	0	0	0	-	-
117	**21.3**	**Railway tunnels**	1	1	0	-	-
117	**21.4**	**Historical railway and tunnel features**	12	14	22	-	-
119	21.5	Royal Mail tunnels	0	0	0	-	-
119	21.6	Historical railways	0	0	0	-	-
120	**21.7**	**Railways**	1	3	28	-	-
121	21.8	Crossrail 1	0	0	0	0	-
121	21.9	Crossrail 2	0	0	0	0	-
121	21.10	HS2	0	0	0	0	-

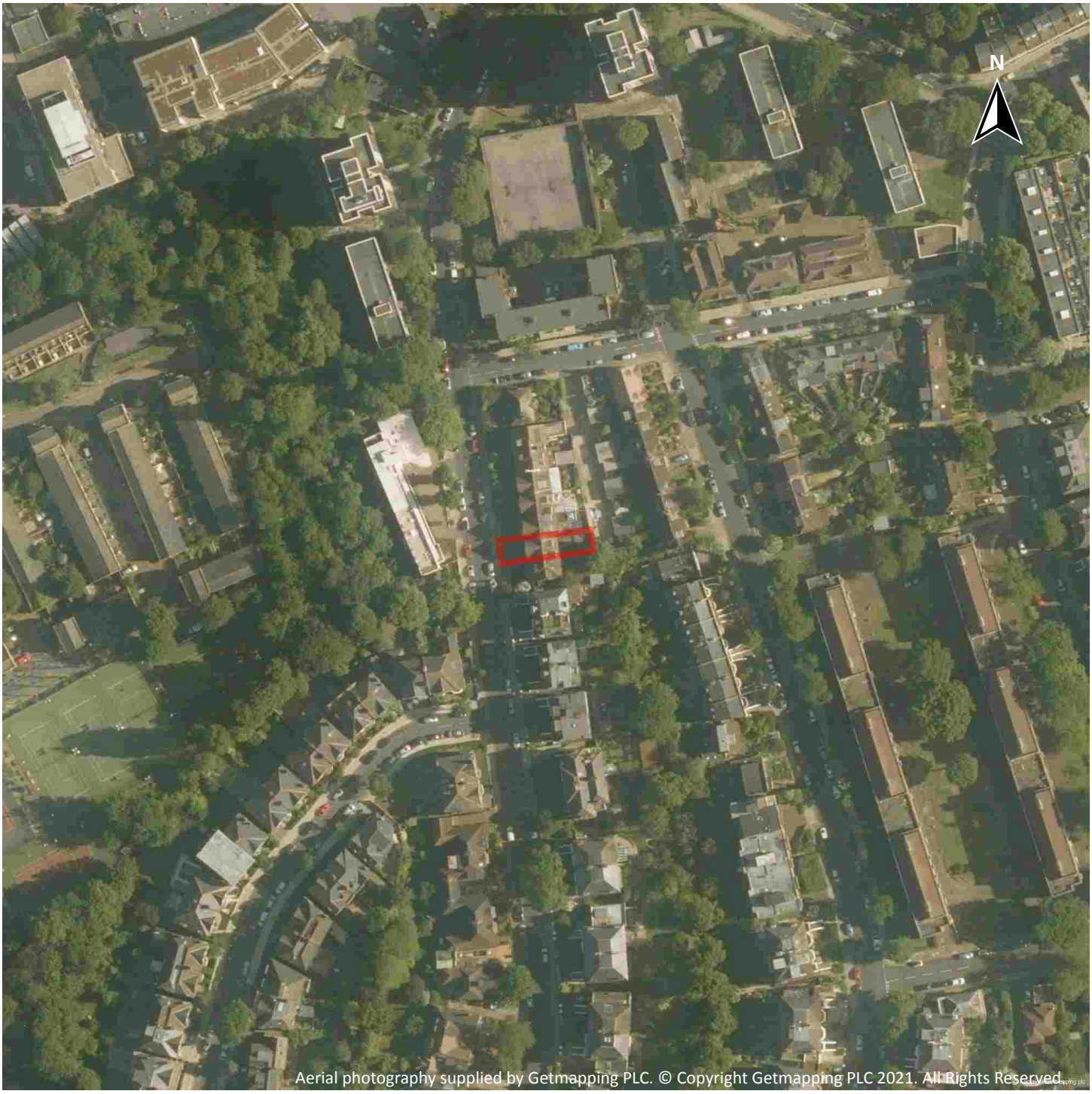
Recent aerial photograph



Capture Date: 29/06/2019

Site Area: 0.02ha

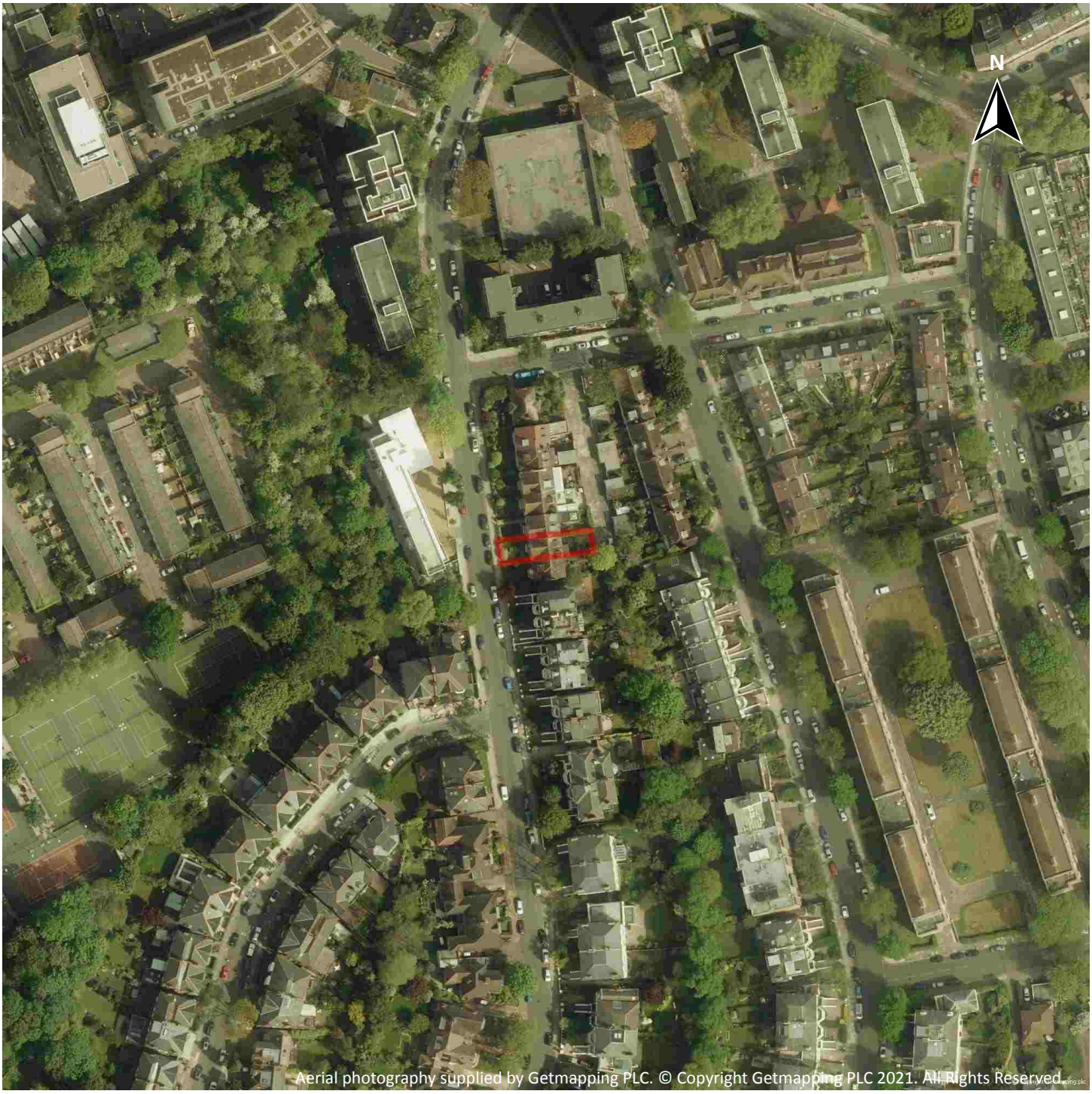
Recent site history - 2016 aerial photograph



Capture Date: 12/08/2016

Site Area: 0.02ha

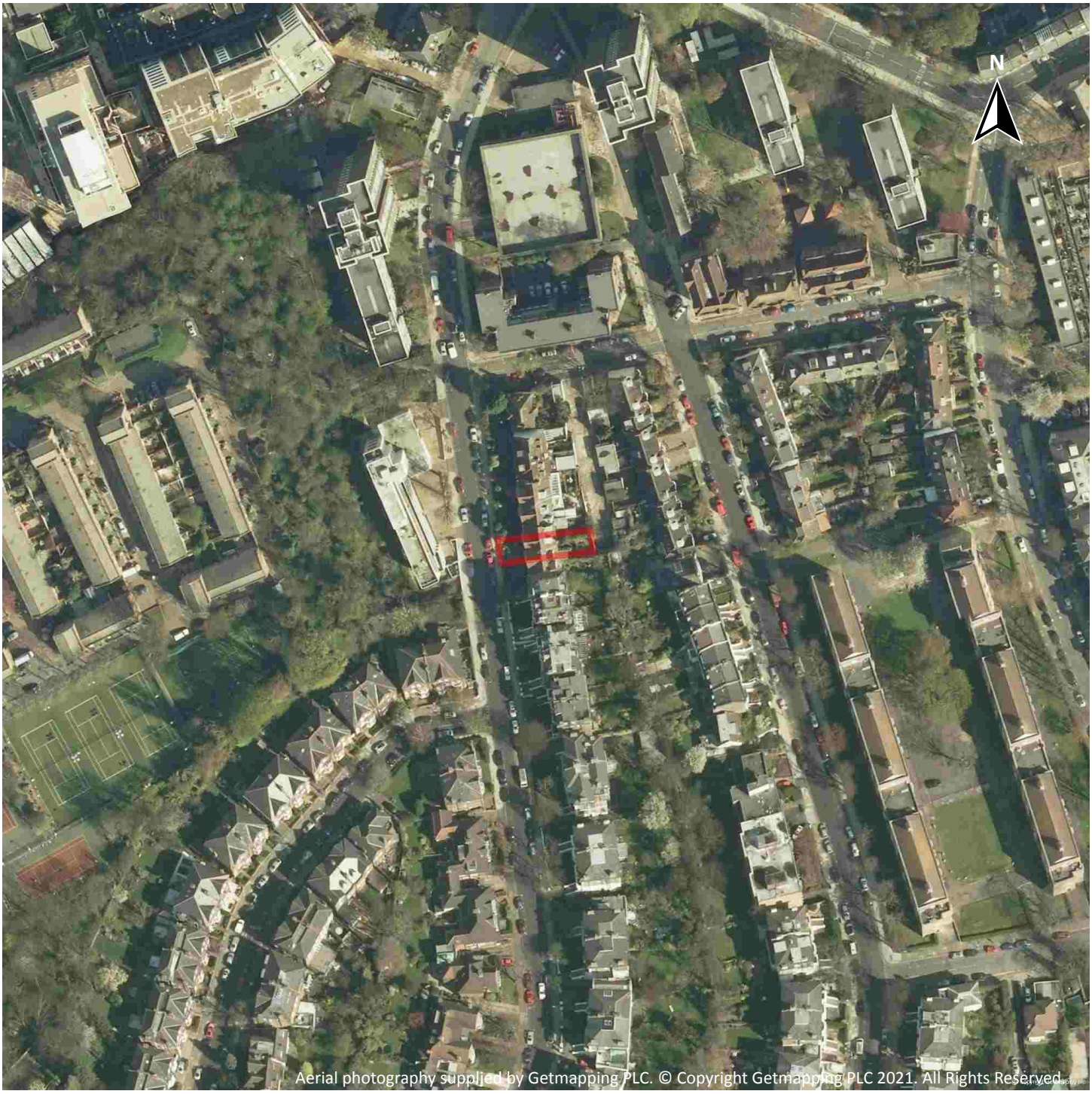
Recent site history - 2014 aerial photograph



Capture Date: 04/05/2014

Site Area: 0.02ha

Recent site history - 2008 aerial photograph



Capture Date: 15/04/2008

Site Area: 0.02ha

Recent site history - 1999 aerial photograph

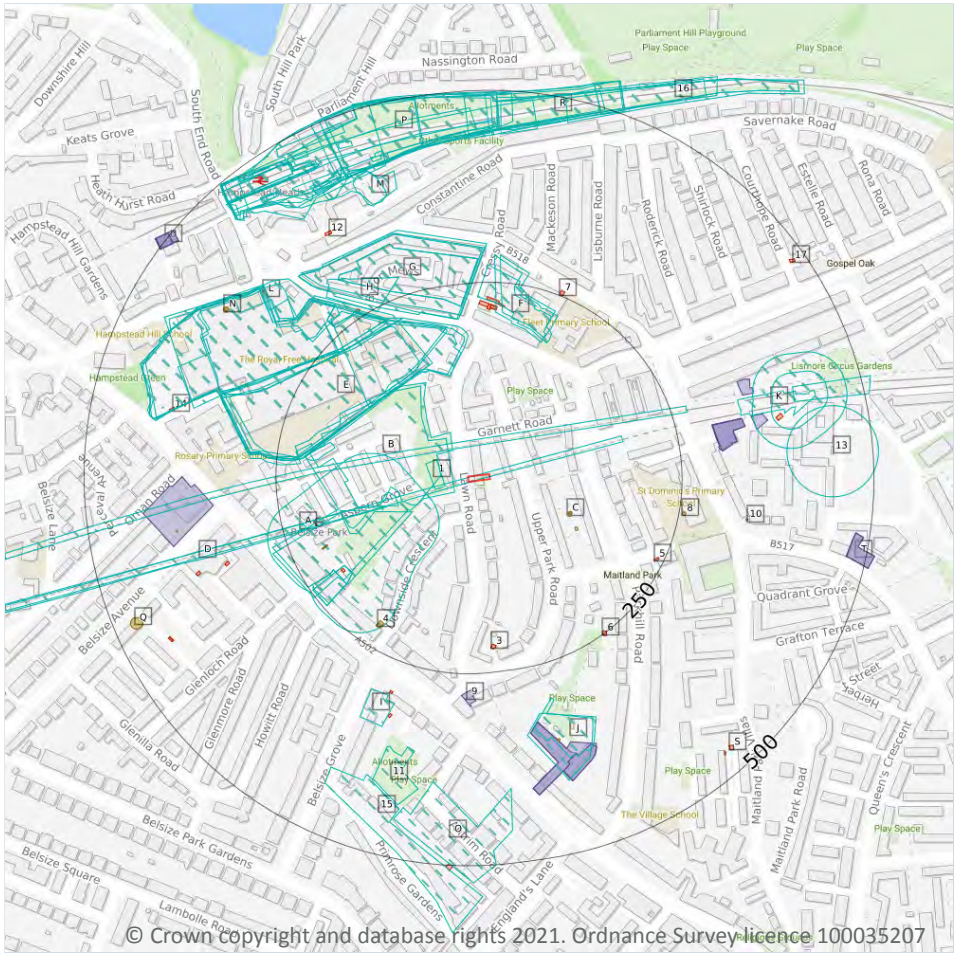
Capture Date: 04/09/1999

Site Area: 0.02ha

OS MasterMap site plan

Site Area: 0.02ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	86

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

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

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Tunnel**	**1958 - 1996**	**2202004**

ID	Location	Land use	Dates present	Group ID
B	20m W	Nursery	1920 - 1938	2240513
1	31m W	Nursery	1938	2272610
2	35m W	Nursery	1920	2223073
B	38m N	Tunnel	1958 - 1996	2189385
A	53m SW	Nursery	1958	2212507
A	83m SW	Nursery	1894	2190133
D	113m W	Tunnel	1866	2223669
E	133m N	Fever Hospital	1920 - 1949	2258272
E	133m N	Fever Hospital	1938	2201013
E	136m N	Hospital	1958	2226049
E	147m NW	Hospital	1974	2290341
E	150m NW	Fever Hospital	1911	2294458
E	152m NW	Hospital	1965	2256733
E	154m NW	Fever Hospital	1894	2182503
E	157m NW	Hospital	1996	2243422
B	177m W	Unspecified Ground Workings	1949	2133657
F	185m N	Laundry	1920	2294499
F	186m NE	Laundry	1938	2234965
F	191m N	Unspecified Works	1958	2159846
A	192m SW	London Transport Station	1965 - 1996	2236449
A	192m SW	Unspecified Station	1958	2256214
G	205m N	Tramway Depot	1938	2286301
G	205m N	Tramway Depot	1938	2248384
A	207m SW	Unspecified Station	1920 - 1949	2246720
G	210m N	Tramway Depot	1920	2219475
E	220m NW	Hospital	1920	2244581
A	220m W	Unspecified Shaft	1866	2143009
G	221m N	Unspecified Depot	1958	2147188

ID	Location	Land use	Dates present	Group ID
G	221m N	Tramway Depot	1949	2233015
E	225m NW	Hospital	1938	2272528
E	229m NW	Hospital	1958 - 1965	2186215
E	229m NW	Hospital	1949	2233954
E	235m NW	Hospital	1938	2250174
H	245m NW	Nursery	1873	2161385
J	296m S	Nursery	1948	2263266
I	297m S	Hospital	1973	2164269
J	312m S	Nursery	1920 - 1938	2252461
K	336m E	Railway Station	1894 - 1920	2270604
K	351m E	Railway Station	1869	2194596
11	354m S	Nursery	1920	2161386
M	374m N	Unspecified Ground Workings	1911	2133655
M	375m N	Unspecified Heap	1894	2136444
K	376m E	Railway Station	1879	2217283
13	388m E	Unspecified Station	1938	2167941
O	393m S	Nursery	1866	2161387
M	398m NW	Railway Sidings	1920 - 1938	2285469
M	401m NW	Cuttings	1873	2199500
15	404m S	Nursery	1894	2161393
K	409m E	Tunnel	1965 - 1996	2282991
M	413m NW	Railway Sidings	1938	2212917
M	415m NW	Railway Sidings	1894	2173940
M	415m NW	Railway Building	1894	2245465
M	418m NW	Railway Sidings	1965	2215105
M	418m NW	Railway Building	1965	2284962
M	418m NW	Railway Building	1938	2233206
M	418m N	Cuttings	1920	2182541

ID	Location	Land use	Dates present	Group ID
M	419m NW	Cuttings	1949	2205001
M	419m NW	Railway Sidings	1949	2225643
M	420m N	Railway Sidings	1958	2172484
M	420m N	Cuttings	1958	2219301
P	420m N	Cuttings	1965	2181907
M	420m NW	Railway Building	1920	2180900
M	423m N	Cuttings	1894	2248814
P	424m N	Cuttings	1974	2236890
M	428m N	Railway Building	1920 - 1938	2244038
M	441m NW	Railway Building	1920	2257719
R	442m N	Cuttings	1920	2245928
M	442m NW	Railway Building	1949	2231138
P	443m N	Cuttings	1894	2216610
M	447m NW	Railway Station	1911	2217318
M	447m NW	Railway Station	1938 - 1949	2234147
M	447m NW	Railway Station	1894	2176190
M	449m NW	Railway Station	1873	2190899
M	449m NW	Railway Sidings	1920	2241928
R	450m N	Cuttings	1938	2209192
R	450m N	Cuttings	1869	2260130
R	450m N	Cuttings	1879	2278978
M	452m NW	Railway Building	1894	2149200
M	456m NW	Railway Station	1974 - 1996	2233151
M	456m NW	Railway Station	1958 - 1965	2238976
M	456m N	Railway Building	1938 - 1949	2207104
M	466m NW	Railway Building	1958	2148990
16	469m N	Cuttings	1894	2244127
M	476m N	Railway Building	1938	2148989

ID	Location	Land use	Dates present	Group ID
R	491m N	Cuttings	1958	2259086

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**13**

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

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

ID	Location	Land use	Dates present	Group ID
C	111m SE	Unspecified Tank	1981 - 1991	398686
C	111m SE	Unspecified Tank	1952	396874
C	112m SE	Unspecified Tank	1993	387504
C	128m SE	Unspecified Tank	1952 - 1993	411333
A	202m SW	Tanks	1953 - 1966	391879
4	214m SW	Unspecified Tank	1953 - 1966	388520
8	254m E	Unspecified Tank	1896	364578
10	337m E	Unspecified Tank	1993	364579
J	350m S	Unspecified Tank	1896	364569
N	379m NW	Unspecified Tank	1985 - 1991	393324
N	381m NW	Unspecified Tank	1974	395677
D	384m W	Unspecified Tank	1871	364575
Q	462m SW	Unspecified Tank	1871	364577

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	28

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

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

ID	Location	Land use	Dates present	Group ID
A	198m SW	Electricity Substation	1974 - 1991	261022
3	213m S	Electricity Substation	1974 - 1993	257889
F	214m N	Electricity Substation	1953	265552
F	214m N	Electricity Substation	1952 - 1974	268685
F	214m N	Electricity Substation	1981 - 1991	275468
F	218m N	Electricity Substation	1952	244891
F	218m N	Electricity Substation	1993	244890
5	238m SE	Electricity Substation	1974	244878
6	246m SE	Electricity Substation	1974 - 1993	291491
7	251m N	Electricity Substation	1952 - 1953	264786
H	256m NW	Electricity Substation	1985 - 1991	260322
H	256m NW	Electricity Substation	1974	281985
I	290m S	Electricity Substation	1969	244879
I	319m S	Electricity Substation	1969	244876
D	329m W	Electricity Substation	1953 - 1991	271682
L	349m NW	Electricity Substation	1974	275354
L	353m NW	Electricity Substation	1953 - 1991	269261
12	363m NW	Electricity Substation	1972 - 1996	276024
D	369m W	Electricity Substation	1974 - 1991	266102
K	381m E	Electricity Substation	1952 - 1953	259635
14	391m W	Electricity Substation	1953 - 1991	291595

ID	Location	Land use	Dates present	Group ID
Q	436m SW	Electricity Substation	1985 - 1991	263486
Q	436m SW	Electricity Substation	1974	288474
S	467m SE	Electricity Substation	1952 - 1995	285992
S	468m SE	Electricity Substation	1991	291113
17	479m NE	Electricity Substation	1974 - 1991	271127
M	487m NW	Electricity Substation	1972 - 1991	270692
O	498m S	Electricity Substation	1973 - 1995	277599

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	16

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

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

ID	Location	Land use	Dates present	Group ID
9	271m S	Garage	1952 - 1953	85872
K	297m E	Garages	1952	78281
K	297m E	Garages	1952	75422
K	298m E	Garages	1953	78729

ID	Location	Land use	Dates present	Group ID
J	322m S	Garage	1952 - 1963	81457
J	323m S	Garage	1973	77381
D	334m W	Garage	1953 - 1966	84614
K	344m E	Garage	1952 - 1966	80169
K	349m E	Garage	1952 - 1953	84546
J	369m S	Garage	1953	78474
T	474m E	Garage	1966 - 1991	81124
T	475m E	Garage	1967	74406
U	486m NW	Garage	1953 - 1965	80771
U	487m NW	Garage	1952 - 1972	81754
U	490m NW	Garage	1996	74906
U	490m NW	Garage	1985 - 1991	84666

This data is sourced from Ordnance Survey / Groundsure.

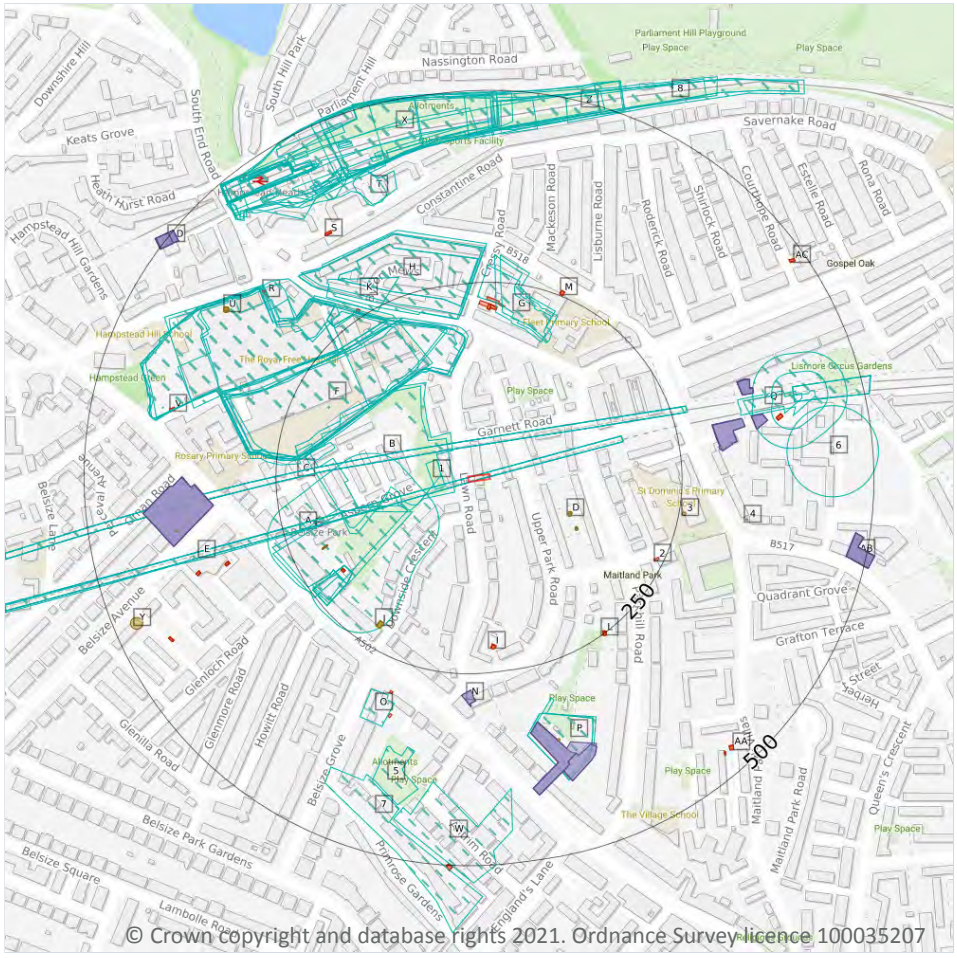
1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	111

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

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Tunnel**	**1965**	**2202004**
A	**On site**	**Tunnel**	**1974**	**2202004**
A	**On site**	**Tunnel**	**1996**	**2202004**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Tunnel**	**1958**	**2202004**
B	20m W	Nursery	1938	2240513
1	31m W	Nursery	1938	2272610
B	35m W	Nursery	1920	2223073
C	38m N	Tunnel	1965	2189385
C	38m N	Tunnel	1974	2189385
C	38m N	Tunnel	1996	2189385
C	38m N	Tunnel	1958	2189385
A	53m SW	Nursery	1958	2212507
A	83m SW	Nursery	1894	2190133
A	88m SW	Nursery	1920	2240513
E	113m W	Tunnel	1866	2223669
F	133m N	Fever Hospital	1938	2258272
F	133m N	Fever Hospital	1938	2201013
F	136m N	Fever Hospital	1949	2258272
F	136m N	Hospital	1958	2226049
F	138m N	Fever Hospital	1920	2258272
F	147m NW	Hospital	1974	2290341
F	150m NW	Fever Hospital	1911	2294458
F	152m NW	Hospital	1965	2256733
F	154m NW	Fever Hospital	1894	2182503
F	157m NW	Hospital	1996	2243422
C	177m W	Unspecified Ground Workings	1949	2133657
G	185m N	Laundry	1920	2294499
G	186m NE	Laundry	1938	2234965
G	191m N	Unspecified Works	1958	2159846
A	192m SW	London Transport Station	1965	2236449
A	192m SW	London Transport Station	1974	2236449

ID	Location	Land Use	Date	Group ID
A	192m SW	London Transport Station	1996	2236449
A	192m SW	Unspecified Station	1958	2256214
H	205m N	Tramway Depot	1938	2286301
H	205m N	Tramway Depot	1938	2248384
A	207m SW	Unspecified Station	1949	2246720
A	207m SW	Unspecified Station	1920	2246720
H	210m N	Tramway Depot	1920	2219475
F	220m NW	Hospital	1920	2244581
A	220m W	Unspecified Shaft	1866	2143009
H	221m N	Tramway Depot	1949	2233015
H	221m N	Unspecified Depot	1958	2147188
F	225m NW	Hospital	1938	2272528
F	229m NW	Hospital	1965	2186215
F	229m NW	Hospital	1949	2233954
F	229m NW	Hospital	1958	2186215
F	235m NW	Hospital	1938	2250174
K	245m NW	Nursery	1873	2161385
P	296m S	Nursery	1948	2263266
O	297m S	Hospital	1973	2164269
P	312m S	Nursery	1938	2252461
P	312m S	Nursery	1920	2252461
Q	336m E	Railway Station	1920	2270604
Q	344m E	Railway Station	1894	2270604
Q	351m E	Railway Station	1869	2194596
5	354m S	Nursery	1920	2161386
T	374m N	Unspecified Ground Workings	1911	2133655
T	375m N	Unspecified Heap	1894	2136444
Q	376m E	Railway Station	1879	2217283

ID	Location	Land Use	Date	Group ID
6	388m E	Unspecified Station	1938	2167941
W	393m S	Nursery	1866	2161387
T	398m NW	Railway Sidings	1920	2285469
T	401m NW	Cuttings	1873	2199500
7	404m S	Nursery	1894	2161393
Q	409m E	Tunnel	1965	2282991
Q	409m E	Tunnel	1974	2282991
Q	409m E	Tunnel	1996	2282991
T	412m NW	Railway Sidings	1938	2285469
T	413m NW	Railway Sidings	1938	2212917
T	415m NW	Railway Sidings	1894	2173940
T	415m NW	Railway Building	1894	2245465
T	418m NW	Railway Sidings	1965	2215105
T	418m NW	Railway Building	1965	2284962
T	418m NW	Railway Building	1938	2233206
T	418m N	Cuttings	1920	2182541
T	419m NW	Cuttings	1949	2205001
T	419m NW	Railway Sidings	1949	2225643
T	420m N	Cuttings	1958	2219301
T	420m N	Railway Sidings	1958	2172484
X	420m N	Cuttings	1965	2181907
T	420m NW	Railway Building	1920	2180900
T	423m N	Cuttings	1894	2248814
X	424m N	Cuttings	1974	2236890
T	428m N	Railway Building	1938	2244038
T	432m N	Railway Building	1920	2244038
T	441m NW	Railway Building	1920	2257719
Z	442m N	Cuttings	1920	2245928

ID	Location	Land Use	Date	Group ID
T	442m NW	Railway Building	1949	2231138
X	443m N	Cuttings	1894	2216610
X	444m N	Cuttings	1920	2245928
T	447m NW	Railway Station	1911	2217318
T	447m NW	Railway Station	1938	2234147
T	447m NW	Railway Station	1938	2234147
T	447m NW	Railway Station	1894	2176190
T	449m NW	Railway Station	1873	2190899
T	449m NW	Railway Sidings	1920	2241928
T	449m NW	Railway Station	1949	2234147
Z	450m N	Cuttings	1938	2209192
Z	450m N	Cuttings	1879	2278978
Z	450m N	Cuttings	1869	2260130
T	452m NW	Railway Building	1894	2149200
T	456m NW	Railway Station	1965	2238976
T	456m NW	Railway Station	1974	2233151
T	456m NW	Railway Station	1996	2233151
T	456m NW	Railway Station	1958	2238976
T	456m N	Railway Building	1938	2207104
T	460m N	Railway Building	1949	2207104
T	466m NW	Railway Building	1958	2148990
8	469m N	Cuttings	1894	2244127
T	476m N	Railway Building	1938	2148989
Z	491m N	Cuttings	1958	2259086

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**26**

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

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
D	111m SE	Unspecified Tank	1981	398686
D	111m SE	Unspecified Tank	1991	398686
D	111m SE	Unspecified Tank	1952	396874
D	112m SE	Unspecified Tank	1993	387504
D	128m SE	Unspecified Tank	1981	411333
D	128m SE	Unspecified Tank	1991	411333
D	128m SE	Unspecified Tank	1993	411333
D	128m SE	Unspecified Tank	1952	411333
A	202m SW	Tanks	1953	391879
A	202m SW	Tanks	1965	391879
A	202m SW	Tanks	1966	391879
A	202m SW	Tanks	1953	391879
J	214m SW	Unspecified Tank	1966	388520
J	214m SW	Unspecified Tank	1953	388520
J	214m SW	Unspecified Tank	1953	388520
J	214m SW	Unspecified Tank	1965	388520
3	254m E	Unspecified Tank	1896	364578
4	337m E	Unspecified Tank	1993	364579
P	350m S	Unspecified Tank	1896	364569
U	379m NW	Unspecified Tank	1985	393324
U	379m NW	Unspecified Tank	1989	393324
U	379m NW	Unspecified Tank	1991	393324
U	379m NW	Unspecified Tank	1991	393324

ID	Location	Land Use	Date	Group ID
U	381m NW	Unspecified Tank	1974	395677
E	384m W	Unspecified Tank	1871	364575
Y	462m SW	Unspecified Tank	1871	364577

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**90**

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

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
A	198m SW	Electricity Substation	1985	261022
A	198m SW	Electricity Substation	1989	261022
A	198m SW	Electricity Substation	1991	261022
A	198m SW	Electricity Substation	1991	261022
A	199m SW	Electricity Substation	1974	261022
I	213m S	Electricity Substation	1981	257889
I	213m S	Electricity Substation	1991	257889
I	214m S	Electricity Substation	1974	257889
G	214m N	Electricity Substation	1953	265552
G	214m N	Electricity Substation	1952	268685
G	214m N	Electricity Substation	1974	268685
G	214m N	Electricity Substation	1981	275468
G	214m N	Electricity Substation	1991	275468
I	215m S	Electricity Substation	1993	257889
G	218m N	Electricity Substation	1952	244891
G	218m N	Electricity Substation	1993	244890
2	238m SE	Electricity Substation	1974	244878

ID	Location	Land Use	Date	Group ID
L	246m SE	Electricity Substation	1981	291491
L	246m SE	Electricity Substation	1991	291491
L	247m SE	Electricity Substation	1974	291491
L	248m SE	Electricity Substation	1993	291491
M	251m N	Electricity Substation	1952	264786
M	251m N	Electricity Substation	1952	264786
M	252m N	Electricity Substation	1953	264786
K	256m NW	Electricity Substation	1974	281985
K	256m NW	Electricity Substation	1985	260322
K	256m NW	Electricity Substation	1989	260322
K	256m NW	Electricity Substation	1991	260322
K	256m NW	Electricity Substation	1991	260322
O	290m S	Electricity Substation	1969	244879
O	319m S	Electricity Substation	1969	244876
E	329m W	Electricity Substation	1985	271682
E	329m W	Electricity Substation	1989	271682
E	329m W	Electricity Substation	1991	271682
E	329m W	Electricity Substation	1991	271682
E	329m W	Electricity Substation	1974	271682
E	329m W	Electricity Substation	1953	271682
E	330m W	Electricity Substation	1953	271682
R	349m NW	Electricity Substation	1974	275354
R	353m NW	Electricity Substation	1953	269261
R	354m NW	Electricity Substation	1953	269261
R	354m NW	Electricity Substation	1985	269261
R	354m NW	Electricity Substation	1989	269261
R	354m NW	Electricity Substation	1991	269261
R	354m NW	Electricity Substation	1991	269261

ID	Location	Land Use	Date	Group ID
S	363m NW	Electricity Substation	1996	276024
S	364m NW	Electricity Substation	1985	276024
S	364m NW	Electricity Substation	1991	276024
S	365m NW	Electricity Substation	1972	276024
E	369m W	Electricity Substation	1985	266102
E	369m W	Electricity Substation	1989	266102
E	369m W	Electricity Substation	1991	266102
E	369m W	Electricity Substation	1991	266102
E	369m W	Electricity Substation	1974	266102
Q	381m E	Electricity Substation	1952	259635
Q	381m E	Electricity Substation	1952	259635
Q	381m E	Electricity Substation	1953	259635
V	391m W	Electricity Substation	1974	291595
V	391m W	Electricity Substation	1953	291595
V	391m W	Electricity Substation	1985	291595
V	391m W	Electricity Substation	1989	291595
V	391m W	Electricity Substation	1991	291595
V	391m W	Electricity Substation	1991	291595
V	392m W	Electricity Substation	1953	291595
Y	436m SW	Electricity Substation	1985	263486
Y	436m SW	Electricity Substation	1989	263486
Y	436m SW	Electricity Substation	1991	263486
Y	436m SW	Electricity Substation	1991	263486
Y	436m SW	Electricity Substation	1974	288474
AA	467m SE	Electricity Substation	1995	285992
AA	467m SE	Electricity Substation	1991	285992
AA	467m SE	Electricity Substation	1995	285992
AA	467m SE	Electricity Substation	1953	285992

ID	Location	Land Use	Date	Group ID
AA	467m SE	Electricity Substation	1952	285992
AA	467m SE	Electricity Substation	1973	285992
AA	468m SE	Electricity Substation	1991	291113
AA	468m SE	Electricity Substation	1991	291113
AC	479m NE	Electricity Substation	1974	271127
AC	479m NE	Electricity Substation	1987	271127
AC	479m NE	Electricity Substation	1988	271127
AC	479m NE	Electricity Substation	1991	271127
T	487m NW	Electricity Substation	1985	270692
T	487m NW	Electricity Substation	1991	270692
T	487m NW	Electricity Substation	1972	270692
W	498m S	Electricity Substation	1995	277599
W	498m S	Electricity Substation	1991	277599
W	498m S	Electricity Substation	1995	277599
W	499m S	Electricity Substation	1973	277599
W	499m S	Electricity Substation	1991	277599
W	499m S	Electricity Substation	1991	277599

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	**0**

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	**37**

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

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
N	271m S	Garage	1953	85872
N	272m S	Garage	1952	85872
Q	297m E	Garages	1952	78281
Q	297m E	Garages	1952	75422
Q	298m E	Garages	1953	78729
P	322m S	Garage	1952	81457
P	322m S	Garage	1963	81457
P	323m S	Garage	1973	77381
E	334m W	Garage	1953	84614
E	334m W	Garage	1965	84614
E	334m W	Garage	1966	84614
E	334m W	Garage	1953	84614
Q	344m E	Garage	1966	80169
Q	344m E	Garage	1952	80169
Q	344m E	Garage	1952	80169
Q	344m E	Garage	1953	80169
Q	344m E	Garage	1965	80169
Q	349m E	Garage	1952	84546
Q	350m E	Garage	1952	84546
Q	350m E	Garage	1953	84546
P	369m S	Garage	1953	78474
AB	474m E	Garage	1974	81124
AB	474m E	Garage	1979	81124

ID	Location	Land Use	Date	Group ID
AB	474m E	Garage	1966	81124
AB	475m E	Garage	1982	81124
AB	475m E	Garage	1982	81124
AB	475m E	Garage	1991	81124
AB	475m E	Garage	1991	81124
AB	475m E	Garage	1967	74406
AD	486m NW	Garage	1953	80771
AD	486m NW	Garage	1965	80771
AD	487m NW	Garage	1972	81754
AD	487m NW	Garage	1952	81754
AD	487m NW	Garage	1952	81754
AD	490m NW	Garage	1996	74906
AD	490m NW	Garage	1985	84666
AD	490m NW	Garage	1991	84666

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

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

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

3.5 Historical waste sites

Records within 500m	9

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

Features are displayed on the Waste and landfill map on **page 34**

ID	Location	Address	Further Details	Date
A	60m N	Site Address: N/A	Type of Site: Waste Rag Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1952
A	83m N	Site Address: N/A	Type of Site: Waste Rag Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1952
A	90m NW	Site Address: N/A	Type of Site: Waste Rag Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1953

ID	Location	Address	Further Details	Date
A	105m N	Site Address: N/A	Type of Site: Waste Rag Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1953
B	202m E	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1965
B	202m E	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1952
B	202m E	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1952
B	203m E	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1953
B	203m E	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1965

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

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	15

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

Features are displayed on the Waste and landfill map on **page 34**

ID	Location	Site	Reference	Category	Sub-Category	Description
C	229m N	100, FLEET ROAD, LONDON, NW3 2QX	WEX137894	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	229m N	100, FLEET ROAD, LONDON, NW3 2QX	WEX277343	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
D	301m NW	ROYAL FREE HOSPITAL, POND STREET, LONDON, NW3 2QG	WEX128841	Using waste exemption	Not on a farm	Use of waste in construction
D	303m NW	Royal Free Hospital Pond Street London NW3 2QG	EPR/GF0936YY/A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes
D	306m NW	Health Services Laboratories LLP Royal Free Hospital NHS Trust London NW3 2QG	EPR/VE5643VB/A001	Treating waste exemption	Non-Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
1	433m SE	Bouygues (UK) Ltd, Maitland Park Estate, Camden, NW3 2EH	WEX241317	Using waste exemption	Not on a farm	Use of waste in construction
E	480m NW	35, SOUTH END ROAD, LONDON, NW3 2PY	WEX223102	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
E	480m NW	35, SOUTH END ROAD, LONDON, NW3 2PY	WEX228291	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
E	480m NW	35, SOUTH END ROAD, LONDON, NW3 2PY	WEX084155	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
E	480m NW	35, SOUTH END ROAD, LONDON, NW3 2PY	WEX076380	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
E	481m NW	35 South End Road London NW3 2PY	EPR/SF0337EL/A001	Treating waste exemption	Non-Agricultural Waste Only	Sorting and de-naturing of controlled drugs for disposal
E	482m NW	35 South End Road London NW3 2PY	EPR/TF0906SB/A001	Treating waste exemption	Non-Agricultural Waste Only	Sorting and de-naturing of controlled drugs for disposal

ID	Location	Site	Reference	Category	Sub-Category	Description
F	494m NE	Macey Chemist 68 Mansfield Road London NW3 2HU	EPR/XE5086WS/A001	Treating waste exemption	Non-Agricultural Waste Only	Sorting and de-naturing of controlled drugs for disposal
F	494m NE	68, MANSFIELD ROAD, LONDON, NW3 2HU	WEX223538	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
F	494m NE	68, MANSFIELD ROAD, LONDON, NW3 2HU	WEX075832	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal

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

4 Current industrial land use

Site Outline

Search buffers in metres (m)

- Recent industrial land uses
- Current or recent petrol stations
- Licensed pollutant release (Part A(2)/B)
- Radioactive Substance Authorisations
- Pollution Incidents (EA/NRW)
- Pollution inventory radioactive waste

4.1 Recent industrial land uses

Records within 250m	13

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 39**

ID	Location	Company	Address	Activity	Category
1	65m S	Zapem Pest Control London	26, Downside Crescent, London, Greater London, NW3 2AS	Pest and Vermin Control	Contract Services
2	77m NW	Air Shaft	Greater London, NW3	Unspecified Quarries Or Mines	Extractive Industries

ID	Location	Company	Address	Activity	Category
3	110m N	Mattress Direct	Unit 2, 32 Lawn Road, London, Greater London, NW3	Beds and Bedding	Consumer Products
4	157m E	Air Shaft	Greater London, NW3	Unspecified Quarries Or Mines	Extractive Industries
A	175m S	Berrydale Publishers	5, Lawn Road, London, Greater London, NW3 2XS	Published Goods	Industrial Products
B	205m SW	Electricity Sub Station	Greater London, NW3	Electrical Features	Infrastructure and Facilities
C	213m W	Air Shaft	Greater London, NW3	Unspecified Quarries Or Mines	Extractive Industries
A	216m S	Electricity Sub Station	Greater London, NW3	Electrical Features	Infrastructure and Facilities
B	218m SW	Belsize Park	Belsize Park Station, Haverstock Hill, London, Greater London, NW3 2AL	Underground Network Stations	Public Transport, Stations and Infrastructure
C	220m W	Air Shaft	Greater London, NW3	Unspecified Quarries Or Mines	Extractive Industries
5	222m N	Electricity Sub Station	Greater London, NW3	Electrical Features	Infrastructure and Facilities
6	236m W	Electricity Sub Station	Greater London, NW3	Electrical Features	Infrastructure and Facilities
C	242m SW	Printline Printers	200B, HAVERSTOCK HILL, London, Greater London, NW3 2AG	Published Goods	Industrial Products

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m **1**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 39**

ID	Location	Company	Address	LPG	Status
G	340m W	BP	215, Haverstock Hill, Belsize Park, London, Inner London, NW3 4QE	No	Open

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	10

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

Features are displayed on the Current industrial land use map on **page 39**

ID	Location	Address	Details	
D	220m N	Top Choice Dry Cleaners, 96 Fleet Road, NW3 2QX	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
D	220m N	Top Choice Dry Cleaners, 96 Fleet Road, NW3 2QX	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

ID	Location	Address	Details	
E	270m SW	Perkins Dry Cleaners, 171 Haverstock Hill, NW3 4QS	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
E	275m SW	Swan Dry Cleaners, 163 Haverstock Hill, NW3 4QT	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
E	275m SW	Swans Dry Cleaners, 163 Haverstock Hill, NW3 4QT	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
E	279m SW	Perkins Dry Cleaners, 171 Haverstock Hill, NW3 4QS	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
F	293m NW	Royal Free Hospital, Pond St, Hampstead, NW3 2QG	Process: Combustion & Incineration Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
G	365m W	Belsize Park Service Station, 215 Haverstock Hill, London, NW3 4QE	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
H	391m E	Visage, 171 Malden Road, London, Greater London, NW5 4HT	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
H	395m E	Visage, 171 Malden Road, NW5 4HT	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	**38**

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

Features are displayed on the Current industrial land use map on **page 39**

ID	Location	Address	Details	
D	256m N	Polymasc Pharmaceuticals Plc, Anthony Nolan Building,royal Free Hospital Site,fleet Road Hampstead, London, NW3 2EZ	Operator: Polymasc Pharmaceuticals Plc Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AU4924 Date of approval: 20/02/1996	Effective from: 20/02/1996 Last date of update: 01/01/2015 Status: Revoked/cancelled
F	293m NW	Royal Free Campus, Rowland Hill Street, London, NW3 2PF	Operator: University College London Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: BY6001 Date of approval: 03/08/2005	Effective from: - Last date of update: 01/01/2020 Status: Replaced
F	293m NW	Royal Free Campus, Rowland Hill Street, London, NW3 2PF	Operator: University College London Type: - Permission number: SB3598DT Date of approval: -	Effective from: 22/05/2017 Last date of update: 01/01/2020 Status: Issued
F	293m NW	Royal Free Campus, Rowland Hill Street, London, NW3 2PF	Operator: University College London Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BZ9758 Date of approval: 05/01/2006	Effective from: - Last date of update: 01/01/2020 Status: Replaced
F	293m NW	Anthony Nolan Histocompatibility Laboratories, 77B Fleet Road, Hampstead, London, NW3 2QR	Operator: Anthony Nolan Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: CB5171 Date of approval: 02/10/2007	Effective from: - Last date of update: 01/01/2020 Status: Replaced
F	293m NW	Anthony Nolan Histocompatibility Laboratories, 77B Fleet Road, Hampstead, London, NW3 2QR	Operator: Anthony Nolan Trust Type: - Permission number: AB3298DT Date of approval: -	Effective from: - Last date of update: 01/01/2020 Status: Surrendered
F	293m NW	Anthony Nolan Histocompatibility Laboratories, 77B Fleet Road, Hampstead, London, NW3 2QR	Operator: Anthony Nolan Trust Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: CB1915 Date of approval: 02/10/2007	Effective from: - Last date of update: 01/01/2020 Status: Replaced
F	293m NW	The Royal Free Hospital, Pond Street, Hampstead, NW3 2QG	Operator: Royal Free London NHS Foundation Trust Type: - Permission number: UB3935DG Date of approval: -	Effective from: 20/05/2015 Last date of update: 01/01/2020 Status: Issued

ID	Location	Address	Details	
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 14/02/2001	Effective from: 12/03/2001 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 01/12/2003	Effective from: 01/01/2004 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 06/12/2004	Effective from: 06/12/2004 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 09/09/2005	Effective from: 09/09/2005 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 09/12/2005	Effective from: 09/12/2005 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 13/07/2009	Effective from: 13/07/2009 Last date of update: 01/01/2015 Status: Effective
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Superseded By Variation

ID	Location	Address	Details	
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 12/07/1995	Effective from: 09/08/1995 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 17/01/1996	Effective from: 18/01/1996 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB4095 Date of approval: 25/10/1996	Effective from: 28/10/1996 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital,pond Street,hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AE8658 Date of approval: 11/07/1995	Effective from: 11/07/1995 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AH9987 Date of approval: 13/04/2006	Effective from: 11/05/2006 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AH9987 Date of approval: 20/07/2007	Effective from: 17/08/2007 Last date of update: 01/01/2015 Status: Revoked/cancelled
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital,pond Street,hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AE8658 Date of approval: 29/04/2002	Effective from: 29/04/2002 Last date of update: 01/01/2015 Status: Superseded By Variation

ID	Location	Address	Details	
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital,pond Street,hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AE8658 Date of approval: 25/07/2002	Effective from: 25/07/2002 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital,pond Street,hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AE8658 Date of approval: 22/11/2004	Effective from: 22/11/2004 Last date of update: 01/01/2015 Status: Effective
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AH9987 Date of approval: 21/06/1994	Effective from: 25/06/1994 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AH9987 Date of approval: 11/08/1997	Effective from: 01/09/1997 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free Hampstead Nhs Trust, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free Hampstead Nhs Trust Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AH9987 Date of approval: 12/05/2003	Effective from: 09/06/2003 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free And University College Medical School Of University College London, Royal Free Hospital,pond Street,hampstead, London, NW3 2QG	Operator: Royal Free And University College Medical School Of University College London Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AR0403 Date of approval: 27/10/1998	Effective from: 27/10/1998 Last date of update: 01/01/2015 Status: Superseded By Variation

ID	Location	Address	Details	
F	293m NW	Royal Free And University College Medical School Of University College London, Royal Free Hospital,pond Street,hampstead, London, NW3 2QG	Operator: Royal Free And University College Medical School Of University College London Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: AR0403 Date of approval: 28/11/2001	Effective from: 28/11/2001 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Polymasc Pharmaceuticals Plc, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Polymasc Pharmaceuticals Plc Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BJ5678 Date of approval: 14/02/2001	Effective from: 12/03/2001 Last date of update: 01/01/2015 Status: Revoked/cancelled
F	293m NW	Royal Free And University College Medical School Of University College London, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free And University College Medical School Of University College London Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BJ5694 Date of approval: 14/02/2001	Effective from: 12/03/2001 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free And University College Medical School Of University College London, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free And University College Medical School Of University College London Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BJ5694 Date of approval: 01/12/2003	Effective from: 01/01/2004 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Royal Free And University College Medical School Of University College London, Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Royal Free And University College Medical School Of University College London Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BJ5694 Date of approval: 03/08/2005	Effective from: 31/08/2005 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Anthony Nolan Trust (ant), Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Anthony Nolan Trust (ant) Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BJ5716 Date of approval: 14/02/2001	Effective from: 12/03/2001 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Anthony Nolan Trust (ant), Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Anthony Nolan Trust (ant) Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BJ5716 Date of approval: 01/12/2003	Effective from: 01/01/2004 Last date of update: 01/01/2015 Status: Superseded By Variation

ID	Location	Address	Details	
F	293m NW	Anthony Nolan Trust (ant), Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG	Operator: Anthony Nolan Trust (ant) Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BJ5716 Date of approval: 14/07/2005	Effective from: 11/08/2005 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Anthony Nolan Trust (ant), Fleet Road, London, NW3 2QR	Operator: Anthony Nolan Trust (ant) Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: BR6392 Date of approval: 29/04/2002	Effective from: 29/04/2002 Last date of update: 01/01/2015 Status: Superseded By Variation
F	293m NW	Anthony Nolan Trust (ant), Fleet Road, London, NW3 2QR	Operator: Anthony Nolan Trust (ant) Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: BR6392 Date of approval: 14/07/2005	Effective from: 14/07/2005 Last date of update: 01/01/2015 Status: Superseded By Variation

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

4.13 Licensed Discharges to controlled waters

Records within 500m	0

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 39**

ID	Location	Details	
F	321m NW	Incident Date: 13/08/2001 Incident Identification: 23810 Pollutant: Specific Waste Materials Pollutant Description: Metal Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m	2

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

Features are displayed on the Current industrial land use map on **page 39**

ID: F, Location: 293m NW, Permit: AB4095
Operator: ROYAL FREE HAMPSTEAD NHS TRUST
Address: ROYAL FREE HOSPITAL POND STREET HAMPSTEAD LONDON NW3 2QG
Releases:

Route	Substance	Quantity released
Wastewater	Selenium 75	51MBq -
Wastewater	Technetium 99m	804GBq -
Wastewater	Indium 111	4.54GBq -
Wastewater	Iodine 123	243GBq -
Wastewater	Other Beta/Gamma	2.21TBq -
Wastewater	Iodine 131	95.7GBq -
Wastewater	Total Beta/Gamma (Excl Tritium)	3.56TBq -
Wastewater	Fluorine 18	200GBq -

ID: F, Location: 302m NW, Permit: SB3598DT
Operator: UNIVERSITY COLLEGE LONDON
Address: Royal Free Campus, Rowland Hill Street, London NW3 2PF
Releases:

Route	Substance	Quantity released
Wastewater	Carbon 14	- -
Wastewater	Phosphorus 33	38MBq -
Wastewater	Other Beta/Gamma	42MBq -
Wastewater	Iodine 125	- -
Wastewater	Total Beta/Gamma (Excl Tritium)	83.2MBq -

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

5 Hydrogeology - Superficial aquifer

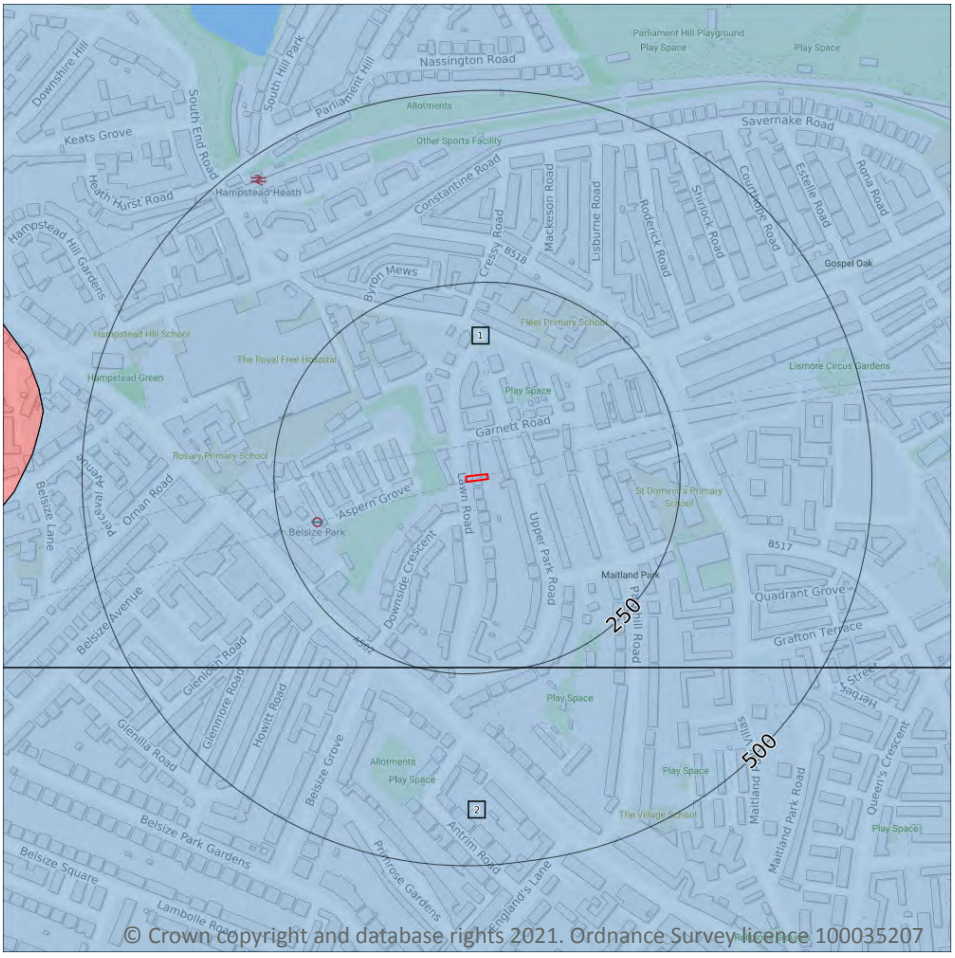
5.1 Superficial aquifer

Records within 500m	0

Aquifer status of groundwater held within superficial geology.

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

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

5.2 Bedrock aquifer

Records within 500m	2

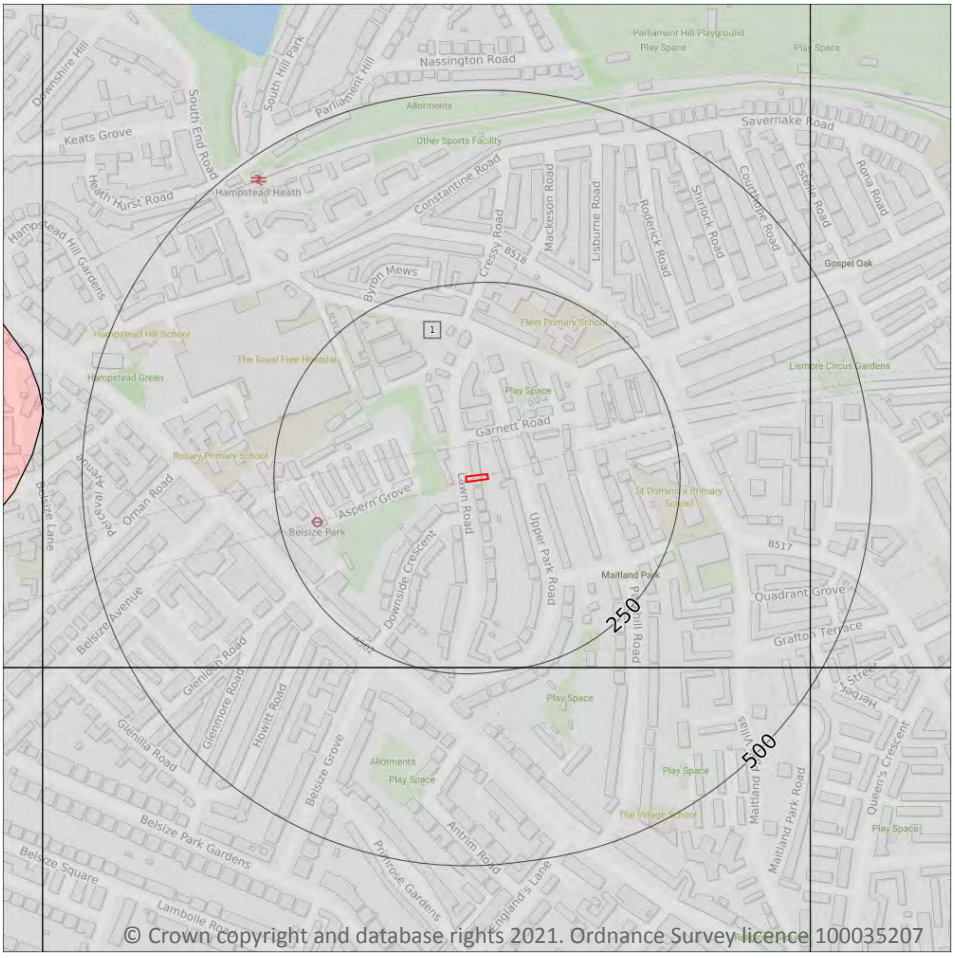
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 54**

ID	Location	Designation	Description
1	**On site**	**Unproductive**	**These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow**
2	242m S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

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

Bedrock vulnerability

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

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	1

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

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

Features are displayed on the Groundwater vulnerability map on **page 55**

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

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

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

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

5.5 Groundwater vulnerability- local information

Records on site	**0**

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

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

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	13

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 57**

ID	Location	Details	
-	1221m SW	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 Easting: 526800 Northing: 184280	Annual Volume (m^3): 10512 Max Daily Volume (m^3): 28.8 Original Application No: - Original Start Date: 12/08/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	1267m SW	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 Easting: 526750 Northing: 184261	Annual Volume (m^3): 10,512 Max Daily Volume (m^3): 28.80 Original Application No: - Original Start Date: 05/12/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 05/12/2013 Version End Date: -
-	1267m SW	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 Easting: 526750 Northing: 184261	Annual Volume (m^3): 10,512 Max Daily Volume (m^3): 28.80 Original Application No: - Original Start Date: 05/12/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 05/12/2013 Version End Date: -
-	1267m SW	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 Easting: 526750 Northing: 184261	Annual Volume (m^3): 10,512 Max Daily Volume (m^3): 28.80 Original Application No: - Original Start Date: 05/12/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 05/12/2013 Version End Date: -
-	1336m SE	Status: Historical Licence No: 28/39/39/0091 Details: Laundry Use Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -

ID	Location	Details	
-	1336m SE	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -
-	1336m SE	Status: Historical Licence No: 28/39/39/0091 Details: Process Water Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -
-	1336m SE	Status: Active Licence No: 28/39/39/0091 Details: Process Water Direct Source: THAMES GROUNDWATER Point: KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LIMITED Easting: 528800 Northing: 184700	Annual Volume (m^3): 17,997 Max Daily Volume (m^3): 604.60 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/05/2012 Version End Date: -
-	1336m SE	Status: Active Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LIMITED Easting: 528800 Northing: 184700	Annual Volume (m^3): 17,997 Max Daily Volume (m^3): 604.60 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/05/2012 Version End Date: -

ID	Location	Details	
-	1547m S	Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARROW HILL Data Type: Point Name: Thames Water Utilities Ltd Easting: 527636 Northing: 183697	Annual Volume (m^3): 631,000 Max Daily Volume (m^3): 2,000 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1554m S	Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 26/09/2002 Expiry Date: 31/03/2007 Issue No: 1 Version Start Date: 26/09/2002 Version End Date: -
-	1554m S	Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 01/04/2007 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 01/04/2007 Version End Date: -
-	1892m S	Status: Historical Licence No: 28/39/39/0035 Details: Animal Watering & General Use in non Farming situations Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT REGENT'S PARK, LONDON NW1 Data Type: Point Name: ZOOLOGICAL SOCIETY OF LONDON Easting: 528000 Northing: 183400	Annual Volume (m^3): 681.9 Max Daily Volume (m^3): 59 Original Application No: - Original Start Date: 04/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 04/04/1966 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**2**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 57**

ID	Location	Details	
-	1526m SE	Status: Historical Licence No: 28/39/39/0173 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: OVAL ROAD, CAMDEN - GRAND UNION REGENTS CANAL Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 528490 Northing: 184020	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 08/12/1994 Expiry Date: - Issue No: 100 Version Start Date: 08/12/1994 Version End Date: -
-	1532m SE	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: SOUTHAMPTON BRIDGE, LONDON, NW8 - REGENTS CANAL Data Type: Point Name: Canal and River Trust Easting: 528500 Northing: 184020	Annual Volume (m^3): 7,010,000 Max Daily Volume (m^3): 19,520 Original Application No: - Original Start Date: 18/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 17/12/2007 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	**5**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 57**

ID	Location	Details	
-	1336m SE	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TWO BORES AT KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LTD Easting: 528800 Northing: 184700	Annual Volume (m^3): 94506 Max Daily Volume (m^3): 1813.8 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date: -

ID	Location	Details	
-	1336m SE	Status: Active Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: KENTISH TOWN SPORTS CENTRE, PRINCE OF WALES ST Data Type: Point Name: GREENWICH LEISURE LIMITED Easting: 528800 Northing: 184700	Annual Volume (m^3): 17,997 Max Daily Volume (m^3): 604.60 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/05/2012 Version End Date: -
-	1547m S	Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARROW HILL Data Type: Point Name: Thames Water Utilities Ltd Easting: 527636 Northing: 183697	Annual Volume (m^3): 631,000 Max Daily Volume (m^3): 2,000 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1554m S	Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 26/09/2002 Expiry Date: 31/03/2007 Issue No: 1 Version Start Date: 26/09/2002 Version End Date: -
-	1554m S	Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 527640 Northing: 183690	Annual Volume (m^3): 631000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 01/04/2007 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 01/04/2007 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m	0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology

Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	0

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

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	0

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

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

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

Features are displayed on the Hydrology map on **page 64**

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

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

6.4 WFD Surface water bodies

Records identified	0

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

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

6.5 WFD Groundwater bodies

Records on site	0

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

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

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

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

7.2 Historical Flood Events

Records within 250m	0

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

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

7.3 Flood Defences

Records within 250m	0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

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

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

7.7 Flood Zone 3

Records within 50m	0

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

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

8 Surface water flooding

Site Outline

Search buffers in metres (m)

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

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

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

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

8.1 Surface water flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**1 in 100 year, 0.1m - 0.3m**

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

Features are displayed on the Surface water flooding map on **page 69**

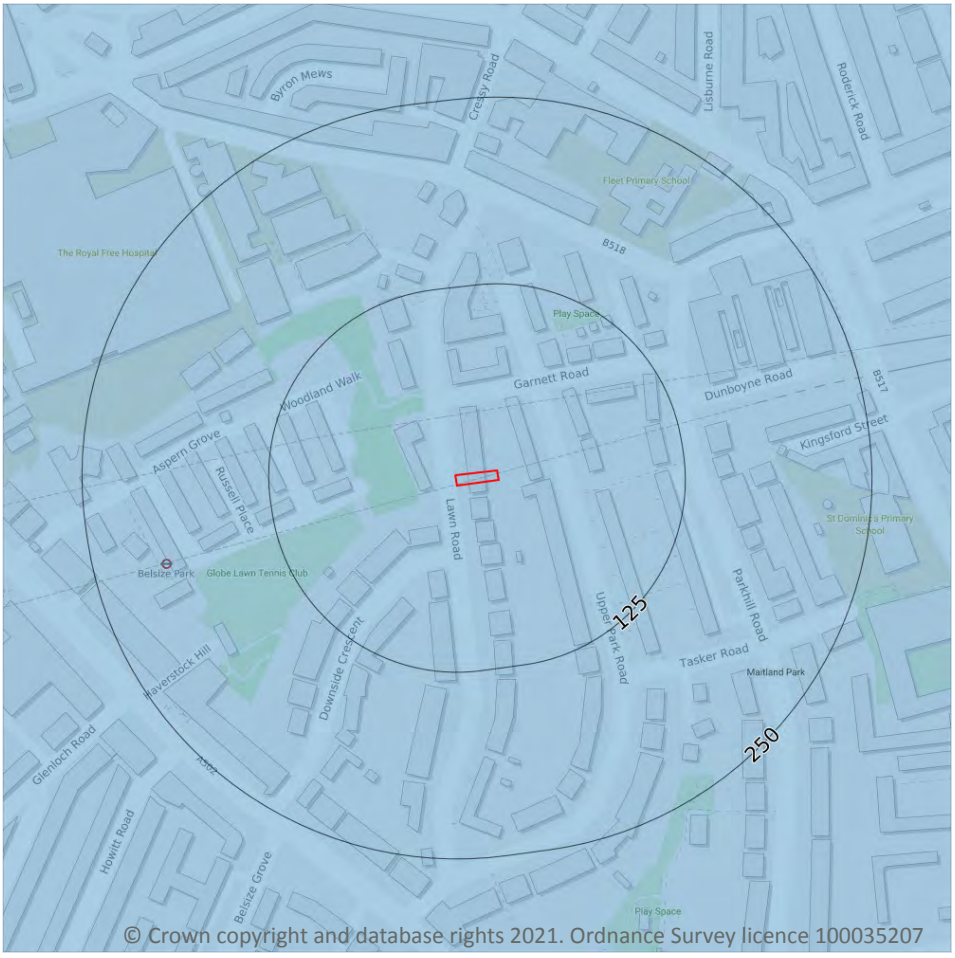
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

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

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

Features are displayed on the Groundwater flooding map on **page 71**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 72**

ID	Location	Name	Data source
-	1625m N	Hampstead Heath Woods	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	2

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

Features are displayed on the Environmental designations map on **page 72**

ID	Location	Name	Data source
1	27m SW	Belsize Wood	Natural England
2	888m S	Adelaide	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	2

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

Features are displayed on the Environmental designations map on **page 72**

ID	Location	Name	Woodland Type
-	1634m N	Ken Wood	Ancient & Semi-Natural Woodland
-	1809m NW	Bishops Wood	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

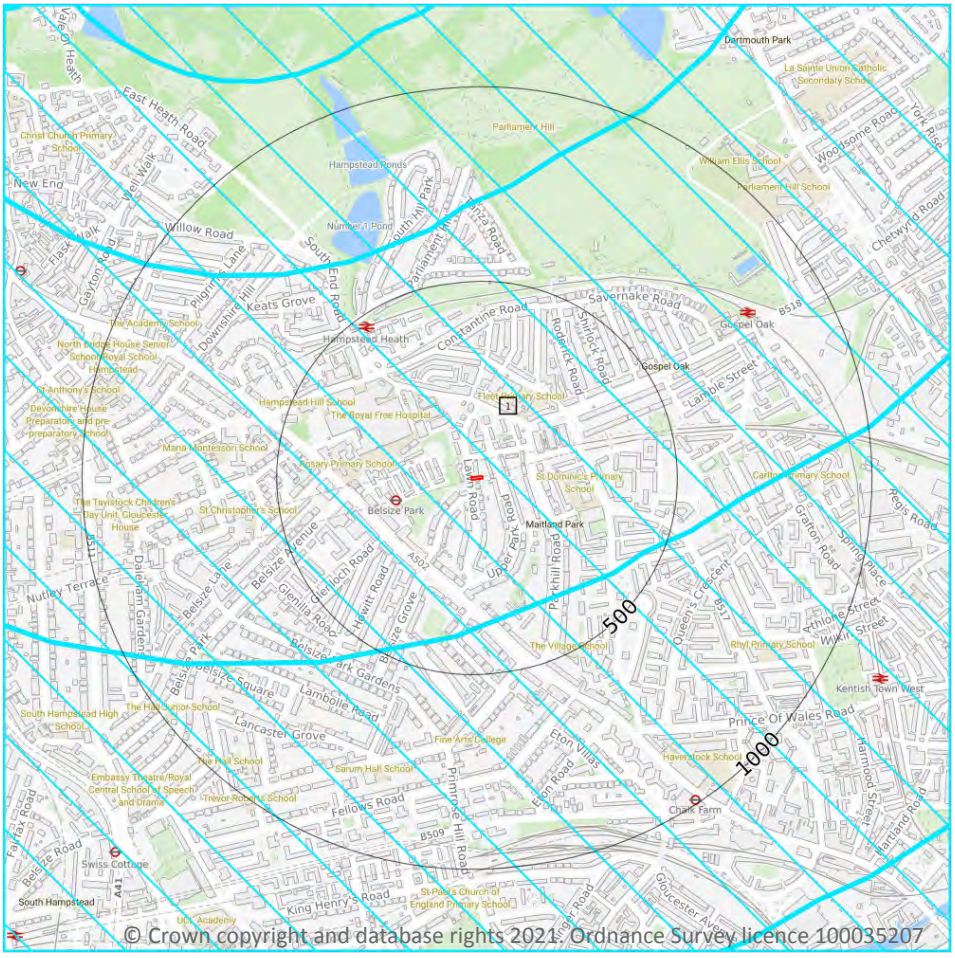
10.16 Nitrate Vulnerable Zones

Records within 2000m	0

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

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

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site	1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 77**

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

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**2**

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

Features are displayed on the SSSI Impact Zones and Units map on **page 77**

ID: -
Location: 1625m N
SSSI name: Hampstead Heath Woods
Unit name: 2
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Favourable
Reportable features:

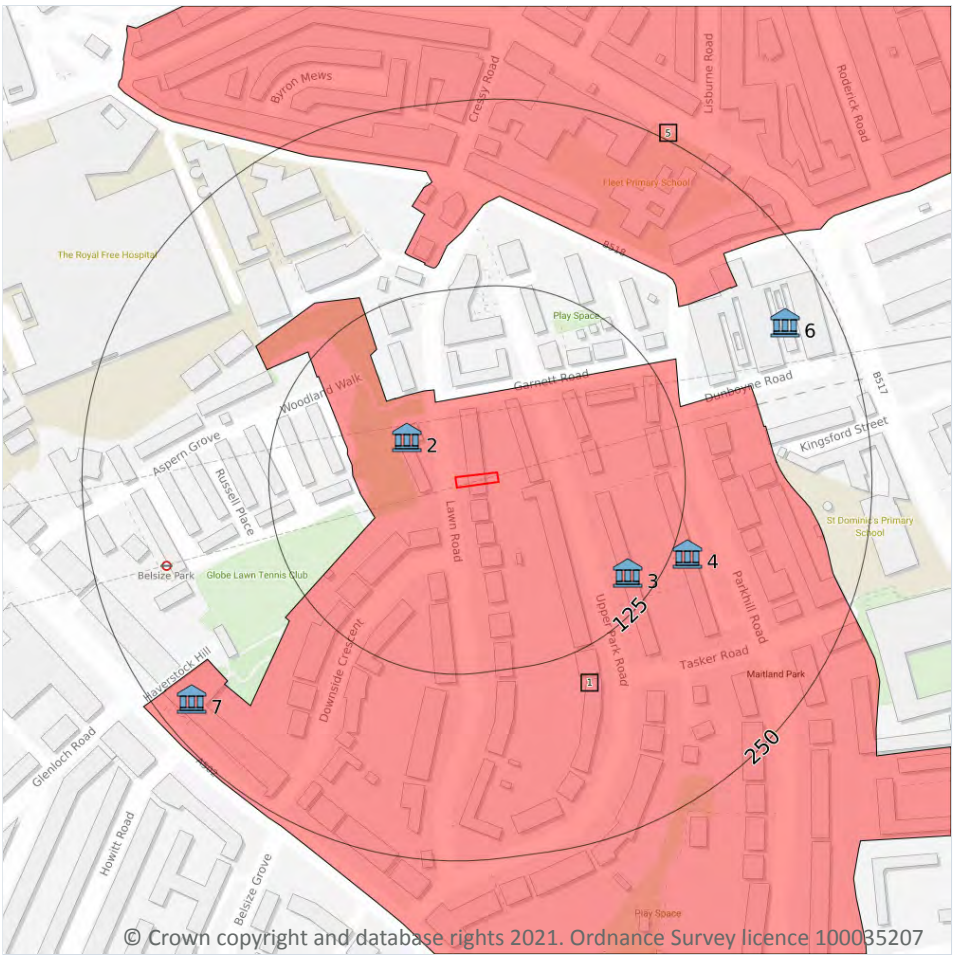
Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Favourable	18/05/2018

ID: -
Location: 1909m N
SSSI name: Hampstead Heath Woods
Unit name: 1
Broad habitat: Fen, Marsh And Swamp - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Spring/flush fen (lowland)	Favourable	18/05/2018

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

11 Visual and cultural designations



Site Outline

Search buffers in metres (m)

- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	5

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

Features are displayed on the Visual and cultural designations map on **page 80**

ID	Location	Name	Grade	Reference Number	Listed date
2	42m NW	Numbers I, 1A, 1B, 1C And 1D And 2-32 Isokon Flats, Gospel Oak, Camden, London, NW3	I	1379280	14/05/1974
3	106m SE	Barn Field, Gospel Oak, Camden, London, NW3	II	1246729	22/12/2000
4	135m E	Wood Field, Gospel Oak, Camden, London, NW3	II	1246726	22/12/2000
6	218m NE	Dunboyne Road Estate, Gospel Oak, Camden, London, NW3	II	1393894	09/08/2010

ID	Location	Name	Grade	Reference Number	Listed date
7	227m SW	Belsize Park Underground Station Including Forecourt Walls, Gatepiers, Gates And Railings, Hampstead Town, Camden, London, NW3	II	1401089	20/07/2011

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

11.5 Conservation Areas

Records within 250m	**2**

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

Features are displayed on the Visual and cultural designations map on **page 80**

ID	Location	Name	District	Date of designation
1	**On site**	**Parkhill**	**Camden**	**16/01/1973**
5	141m N	Mansfield	Camden	11/09/1990

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

11.6 Scheduled Ancient Monuments

Records within 250m	**0**

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

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

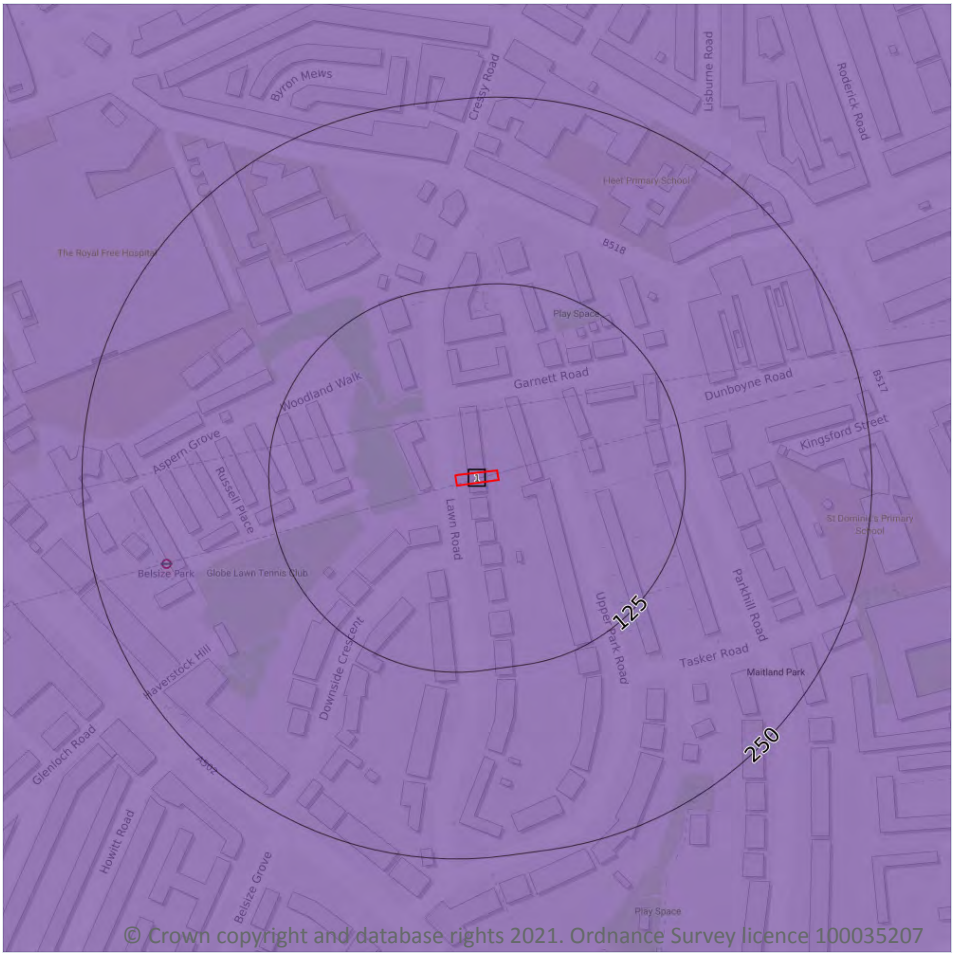
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

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

12.1 Agricultural Land Classification

Records within 250m	1

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

Features are displayed on the Agricultural designations map on **page 84**

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

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

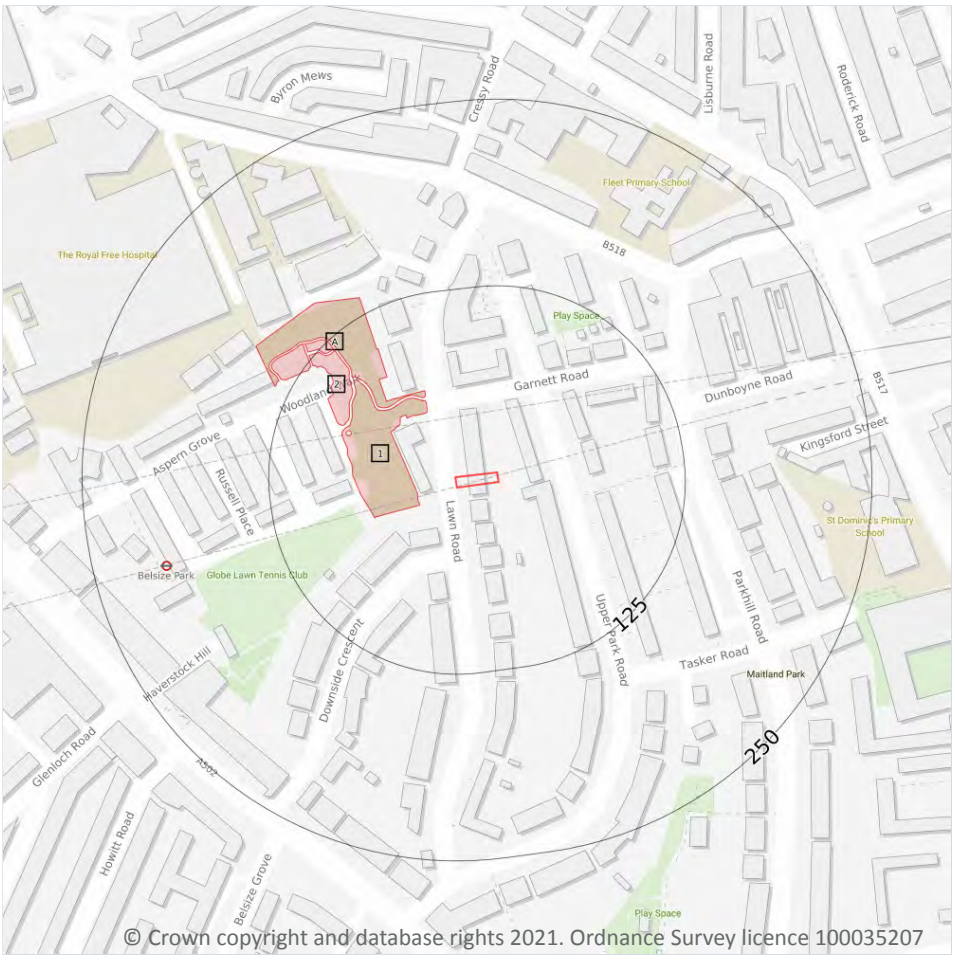
12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

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

13.1 Priority Habitat Inventory

Records within 250m	5

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

Features are displayed on the Habitat designations map on **page 86**

ID	Location	Main Habitat	Other habitats
1	27m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	58m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	81m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	119m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
A	122m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

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

This data is sourced from Natural England.

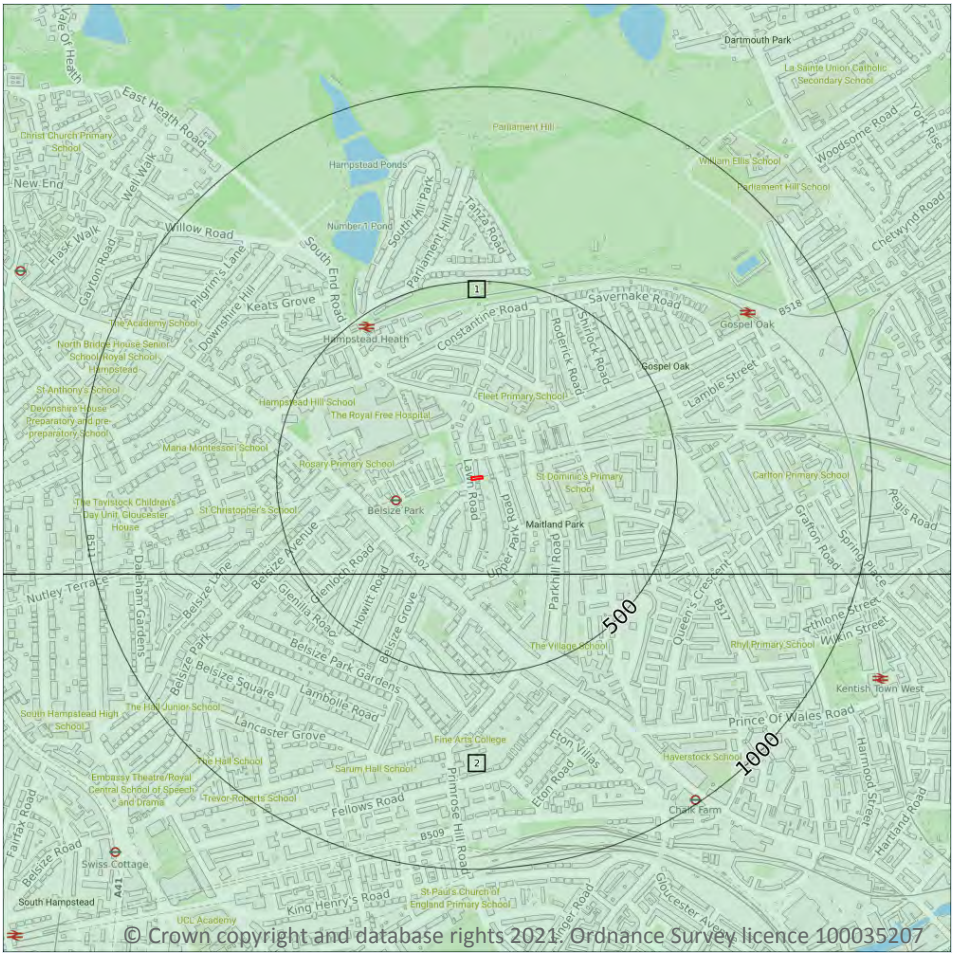
13.4 Limestone Pavement Orders

Records within 250m	0

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m	2

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

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 88**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TQ28NE**
2	242m S	Full	Full	Full	No coverage	TQ28SE

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

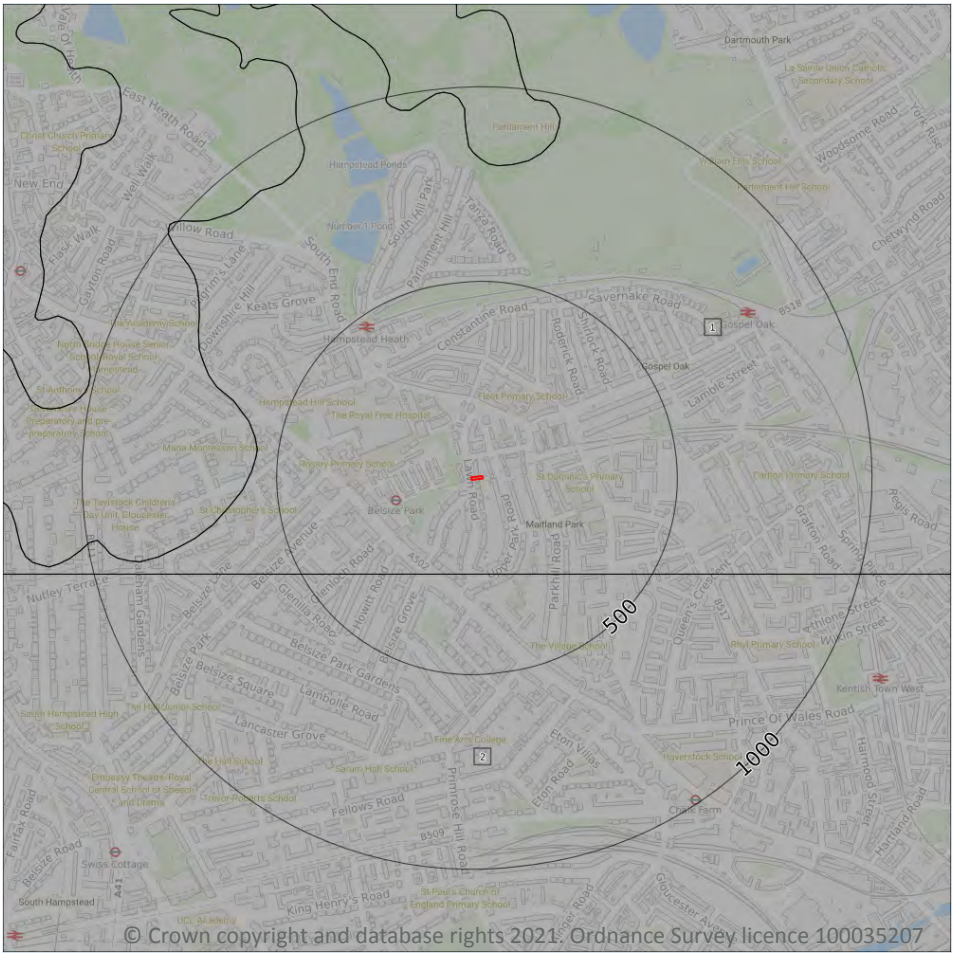
14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m	2

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 91**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-CLAY**	**London Clay Formation - Clay**	**Eocene Epoch**
2	242m S	LC-CLAY	London Clay Formation - Clay	Eocene Epoch

This data is sourced from the British Geological Survey.

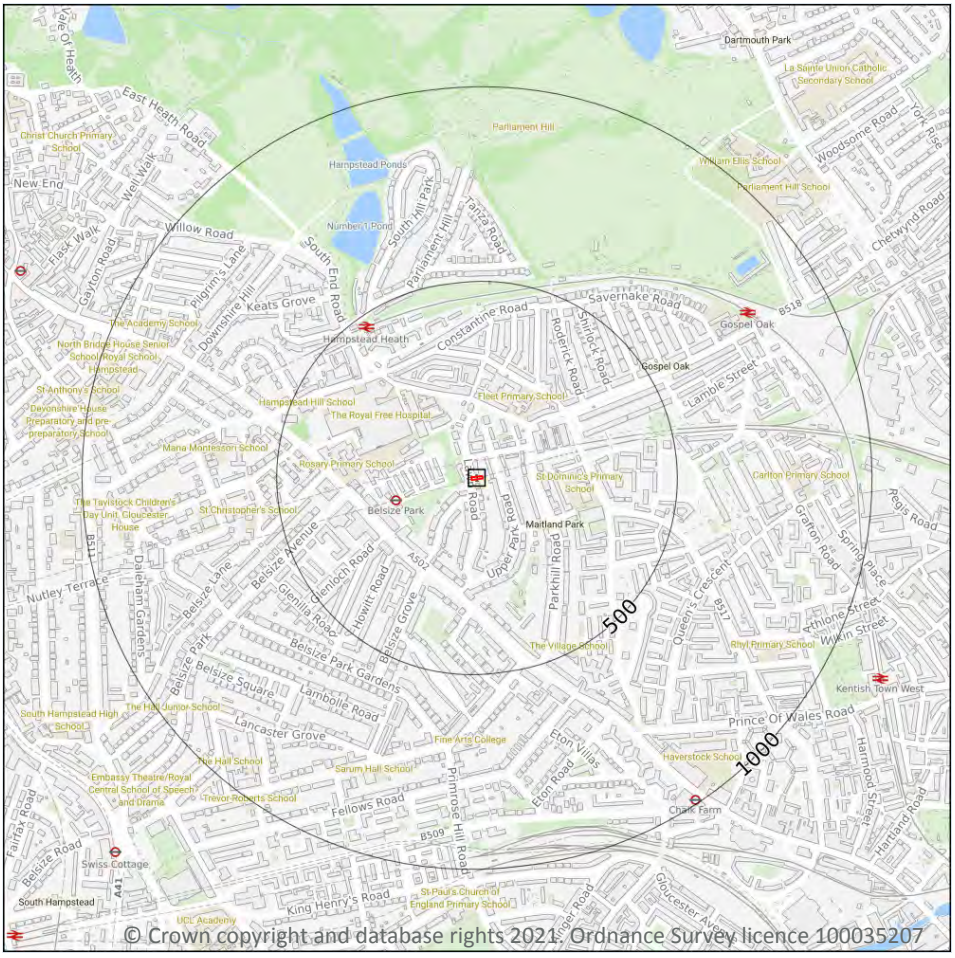
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



15.1 50k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 93**

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

This data is sourced from the British Geological Survey.

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

15.2 Artificial and made ground (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial

15.4 Superficial geology (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

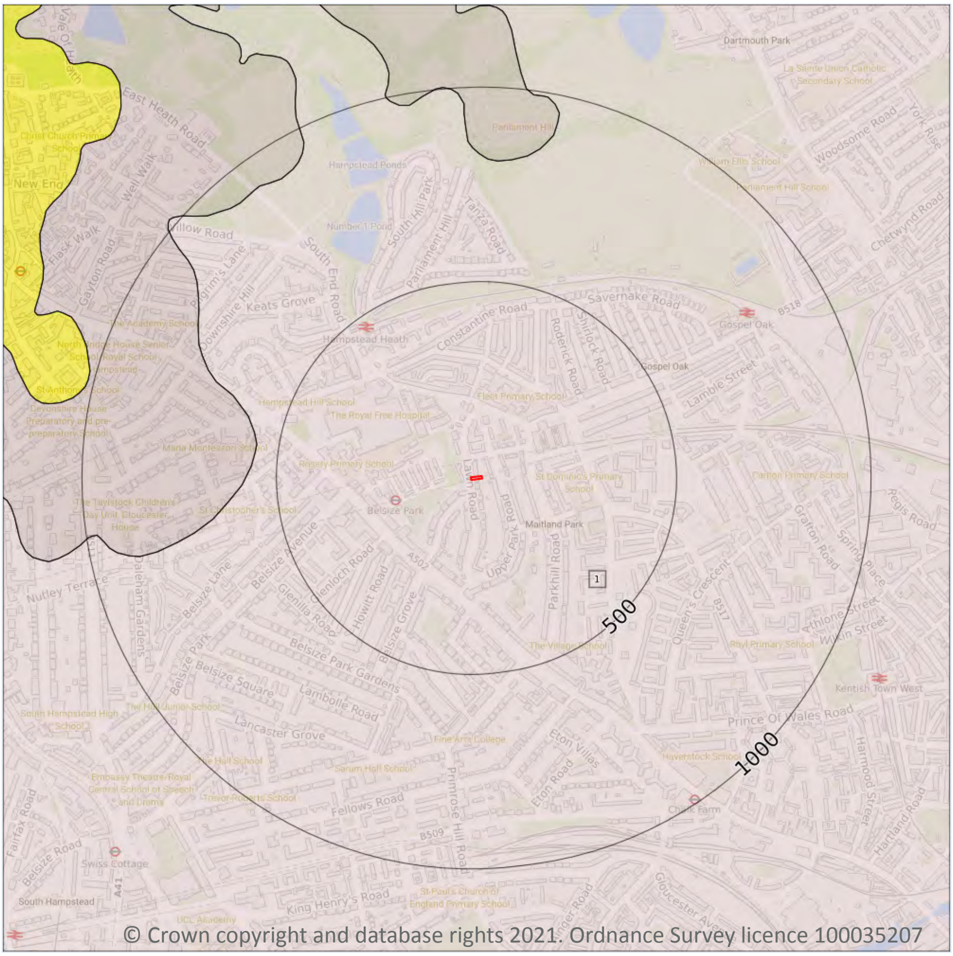
15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 96**

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

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	1

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

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

This data is sourced from the British Geological Survey.

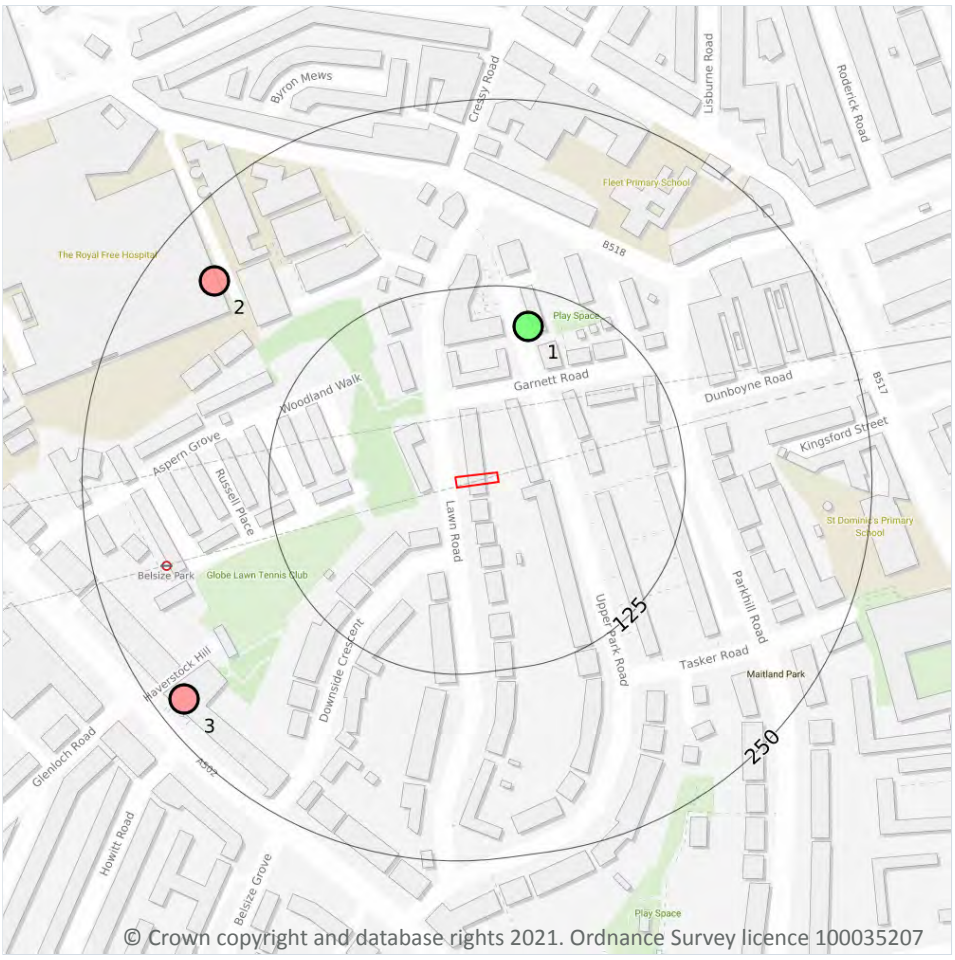
15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m **3**

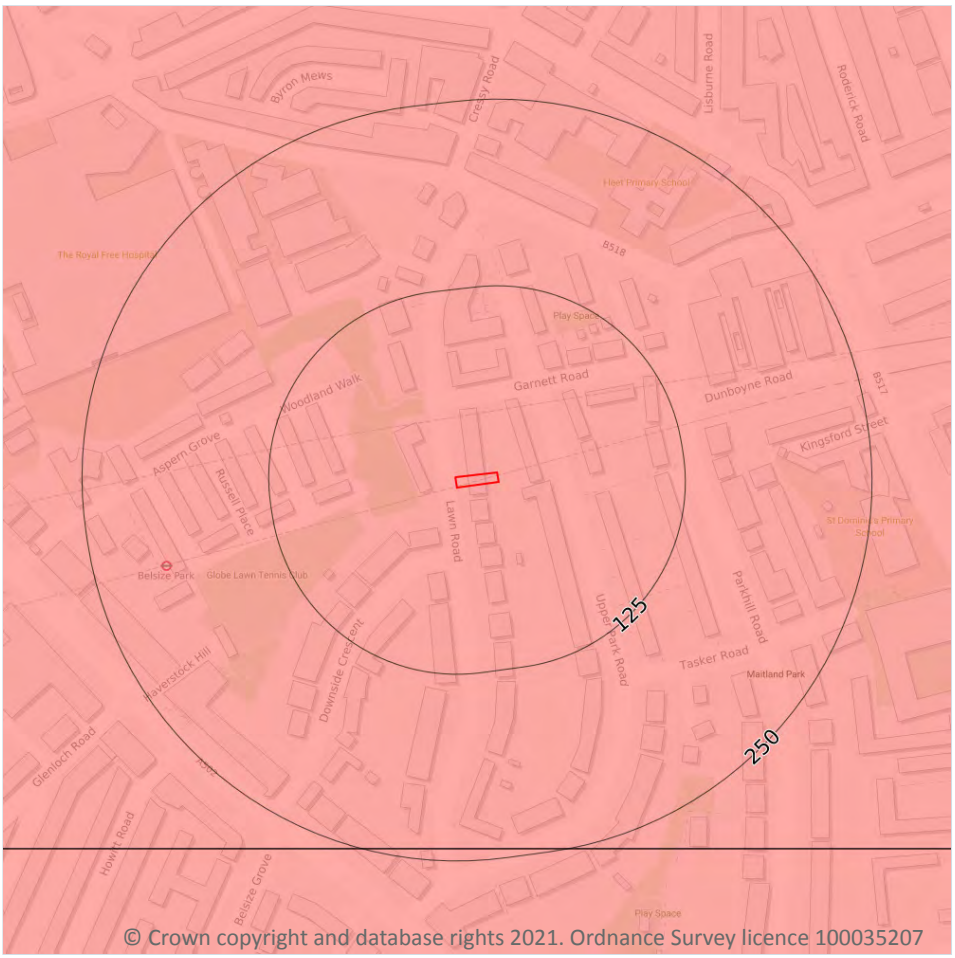
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several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

Features are displayed on the Boreholes map on **page 98**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	100m N	527600 185350	FLEET ROAD HAMPSTEAD	18.28	N	590628
2	208m NW	527390 185380	ROYAL FREE HOSPITAL	177.0	N	590865
3	231m SW	527370 185100	BELSIZE PARK STATION ISLINGTON	43.58	N	590636

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	1

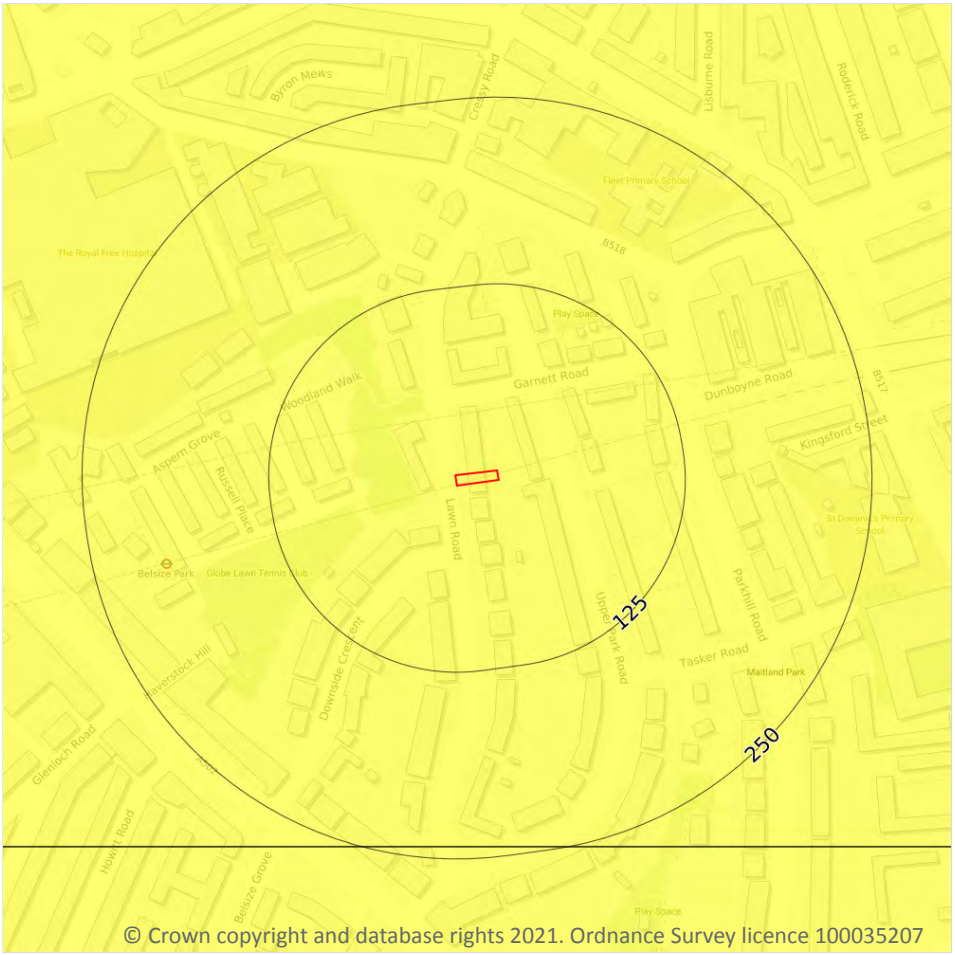
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 100**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Running sands map on **page 101**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits

Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	1

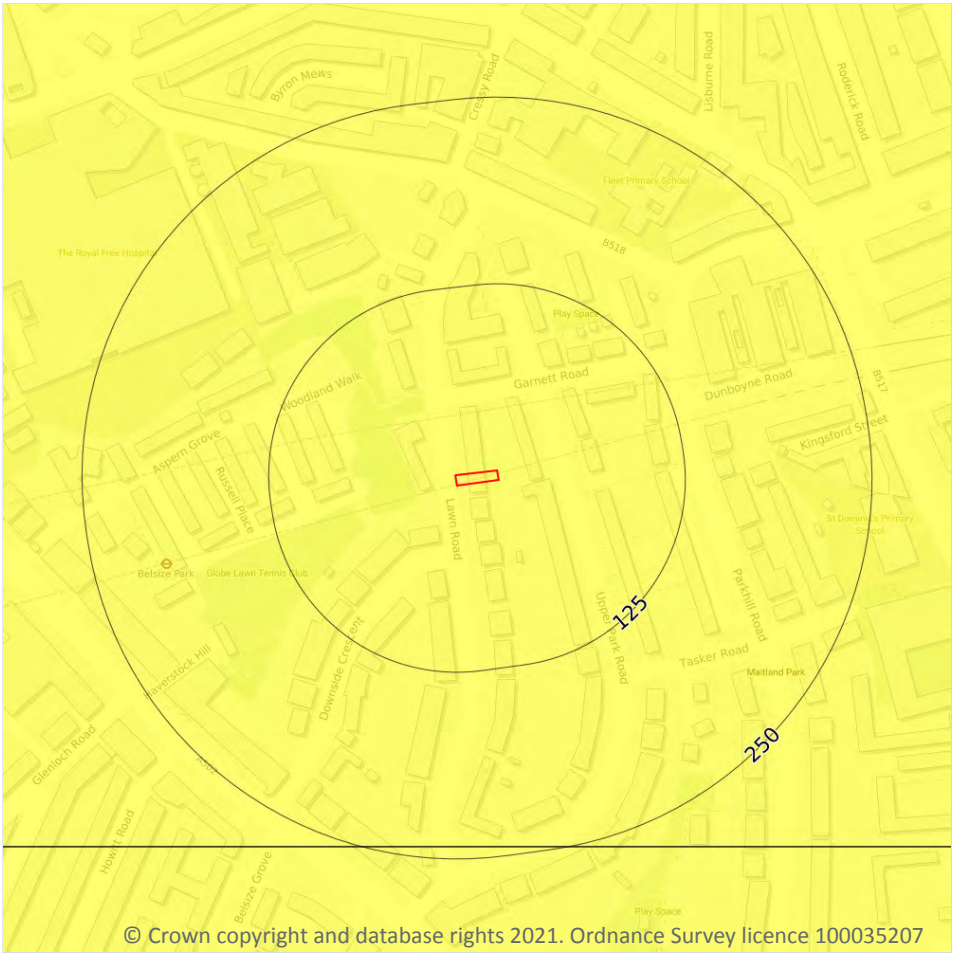
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 102**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

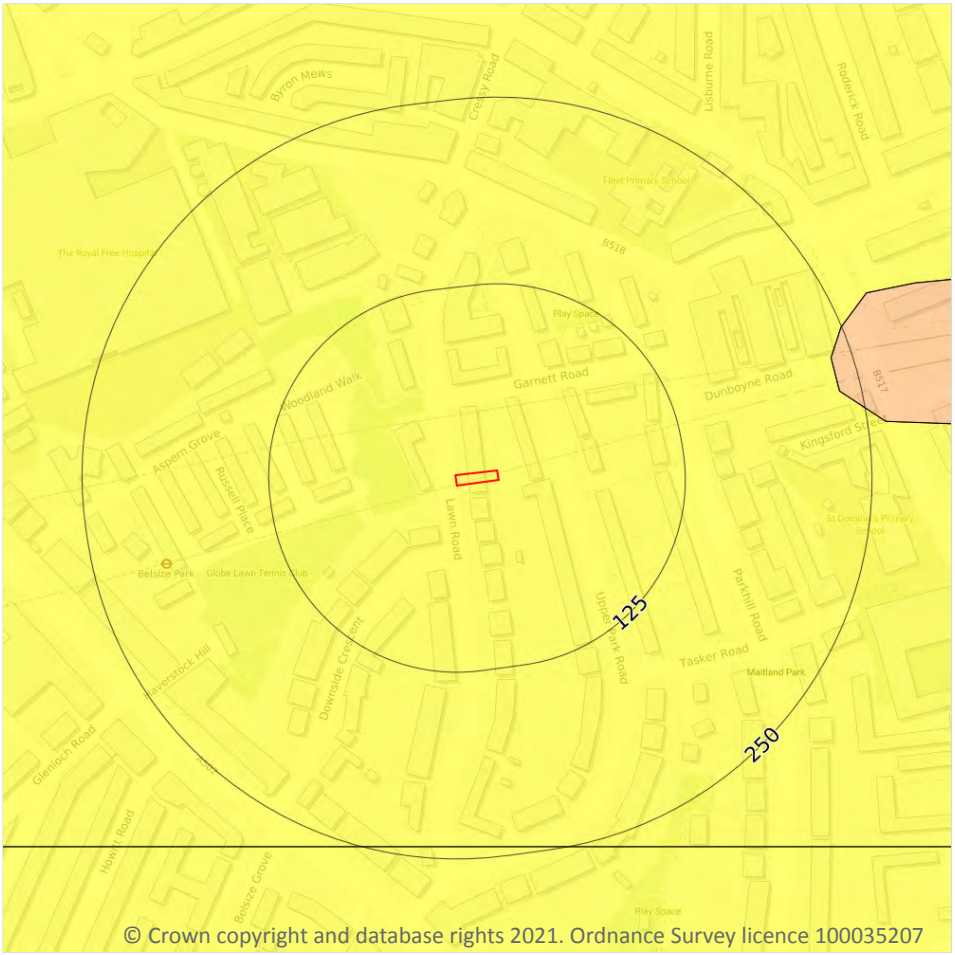
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 103**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Landslides map on **page 104**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks

Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 105**

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

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities

Site Outline

Search buffers in metres (m)

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

Non Coal Mining

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

18.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m	0

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

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	1

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 107**

ID	Location	Land Use	Year of mapping	Mapping scale
2	177m W	Unspecified Ground Workings	1949	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	55

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 107**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Tunnel**	**1965**	**1:10560**
A	**On site**	**Tunnel**	**1974**	**1:10000**
A	**On site**	**Tunnel**	**1995**	**1:10000**
A	**On site**	**Tunnel**	**1958**	**1:10560**
B	38m N	Tunnel	1965	1:10560
B	38m N	Tunnel	1974	1:10000
B	38m N	Tunnel	1995	1:10000
B	38m N	Tunnel	1958	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
C	79m W	Air Shaft	1920	1:10560
C	83m W	Air Shaft	1912	1:10560
1	113m W	Tunnel	1866	1:10560
3	220m W	Unspecified Shaft	1866	1:10560
D	266m W	Air Shaft	1920	1:10560
D	269m W	Air Shaft	1912	1:10560
D	273m W	Air Shaft	1940	1:10560
G	409m E	Tunnel	1965	1:10560
G	409m E	Tunnel	1974	1:10000
G	409m E	Tunnel	1995	1:10000
J	526m NW	Tunnel	1965	1:10560
J	526m NW	Tunnel	1974	1:10000
J	526m NW	Tunnel	1995	1:10000
5	528m NW	Tunnel	1958	1:10560
-	827m W	Unspecified Shaft	1866	1:10560
-	848m E	Tunnel	1965	1:10560
-	848m E	Tunnel	1974	1:10000
-	848m E	Tunnel	1995	1:10000
-	848m E	Tunnel	1958	1:10560
-	860m W	Air Shaft	1920	1:10560
-	903m E	Tunnel	1965	1:10560
-	903m E	Tunnel	1974	1:10000
-	903m E	Tunnel	1995	1:10000
-	903m E	Tunnel	1958	1:10560
-	911m W	Tunnels	1973	1:10000
-	911m W	Tunnels	1968	1:10560
-	911m W	Tunnels	1989	1:10000
-	911m W	Tunnels	1957	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
-	921m E	Tunnel	1965	1:10560
-	921m E	Tunnel	1974	1:10000
-	921m E	Tunnel	1995	1:10000
-	921m E	Tunnel	1958	1:10560
-	922m S	Tunnel	1973	1:10000
-	922m S	Tunnel	1968	1:10560
-	922m S	Tunnel	1989	1:10000
-	922m S	Tunnel	1957	1:10560
-	937m E	Unspecified Shaft	1965	1:10560
-	942m E	Unspecified Shaft	1974	1:10000
-	942m E	Unspecified Shaft	1995	1:10000
-	950m S	Air Shafts	1989	1:10000
-	953m S	Tunnel	1989	1:10000
-	958m S	Tunnels	1957	1:10560
-	960m W	Ventilating Shaft	1865	1:10560
-	964m S	Tunnel	1973	1:10000
-	964m S	Tunnel	1968	1:10560
-	964m S	Tunnel	1989	1:10000
-	971m S	Air Shafts	1989	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	**0**

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

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

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

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

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

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 Clay mining

Records on site	0

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

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

19 Radon

Site Outline

Search buffers in metres (m)

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

19.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 113**

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

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

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	1

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	5

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

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	**18**	**3.2**	**844**	**580**	**0.7**	**97**	**67**	**26**	**43**
20m E	18	3.2	923	634	0.6	99	68	26	50
42m S	18	3.2	982	675	0.7	98	68	27	44
48m N	19	3.3	665	457	0.7	96	68	27	38
50m SE	18	3.2	922	633	0.7	99	67	26	49

This data is sourced from the British Geological Survey.

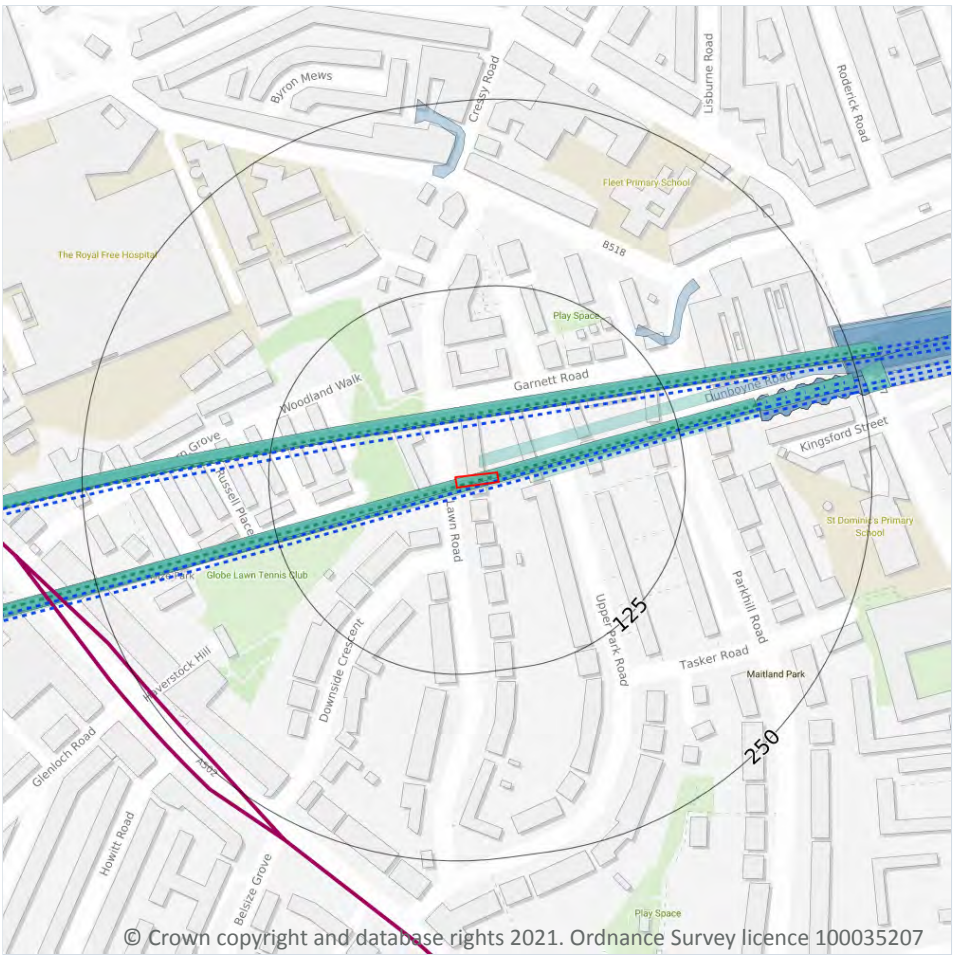
20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects



Site Outline

Search buffers in metres (m)

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

21.1 Underground railways (London)

Records within 250m	1

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

Features are displayed on the Railway infrastructure and projects map on **page 116**

Location	Line Name	Line Section	Track Type	Depth (m bgl)	Operational hours
249m SW	Northern Line	Northern Line	Tunnel	36.7	Mon-Thu: Early 0512 Late 2358 Fri-Sun: Early 0522

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	2

Railway tunnels taken from contemporary Ordnance Survey mapping.

Features are displayed on the Railway infrastructure and projects map on **page 116**

Location	Type
On site	**Railway Tunnel**
40m N	Railway Tunnel

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	48

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

Features are displayed on the Railway infrastructure and projects map on **page 116**

Location	Land Use	Year of mapping	Mapping scale
On site	**Tunnel**	**1981**	**1250**
On site	**Tunnel**	**1993**	**1250**
On site	**Tunnel**	**1991**	**1250**
On site	**Tunnel**	**1965**	**2500**
On site	**Tunnel**	**1974**	**1250**
On site	**Tunnel**	**1966**	**1250**
On site	**Tunnel**	**1953**	**2500**
On site	**Tunnel**	**1952**	**1250**

Location	Land Use	Year of mapping	Mapping scale
On site	**Tunnel**	**1965**	**10560**
On site	**Tunnel**	**1974**	**10000**
On site	**Tunnel**	**1996**	**10000**
On site	**Tunnel**	**1958**	**10560**
5m N	Tunnel	1873	-
23m E	Railway Tunnels	1866	-
36m N	Tunnel	1993	1250
37m N	Tunnel	1965	2500
37m N	Tunnel	1953	2500
37m N	Tunnel	1974	1250
37m N	Tunnel	1966	1250
37m N	Tunnel	1952	1250
37m N	Tunnel	1981	1250
37m N	Tunnel	1991	1250
38m N	Tunnel	1965	10560
38m N	Tunnel	1974	10000
38m N	Tunnel	1996	10000
38m N	Tunnel	1958	10560
53m W	Tunnel	1953	1250
53m W	Tunnel	1974	1250
53m W	Tunnel	1966	1250
54m W	Tunnel	1985	1250
54m W	Tunnel	1989	1250
54m W	Tunnel	1991	1250
59m NW	Tunnel	1953	1250
59m NW	Tunnel	1974	1250
59m NW	Tunnel	1966	1250
60m NW	Tunnel	1985	1250

Location	Land Use	Year of mapping	Mapping scale
60m NW	Tunnel	1989	1250
60m NW	Tunnel	1991	1250
113m W	Tunnel	1874	10560
131m NE	Tramway Sidings	1896	2500
153m E	Railway	1873	-
181m E	Railway	1894	-
181m E	Railway	1866	-
181m E	Railway	1915	-
200m N	Tramway Sidings	1896	2500
242m E	Railway	1896	-
244m E	Railway	1915	-
244m E	Railway	1930	-

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	32

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

Features are displayed on the Railway infrastructure and projects map on **page 116**

Location	Name	Type
On site	**Belsize Fast Tunnel**	**rail**
3m S	Belsize Fast Tunnel	rail
32m N	Belsize Slow Tunnel	rail
37m N	Belsize Slow Tunnel	rail
178m E	Midland Main Line	rail
179m E		rail
180m E	Not given	Multi Track
186m E	Midland Main Line	rail
186m E		rail
193m E	Midland Main Line	rail
193m E		rail
193m E	Not given	Multi Track
199m E	Midland Main Line	rail
199m E		rail
206m E	Midland Main Line	rail
206m E		rail
207m E	Not given	Multi Track
213m E	Midland Main Line	rail
213m E		rail
219m E	Midland Main Line	rail
219m E		rail
220m E	Not given	Multi Track
226m E	Midland Main Line	rail
226m E		rail

Location	Name	Type
232m E	Midland Main Line	rail
232m E		rail
233m E	Not given	Multi Track
240m E	Midland Main Line	rail
240m E		rail
245m E		rail
245m E	Midland Main Line	rail
247m E	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	**0**

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	**0**

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	**0**

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.