

ID	Distance (m)	Direction	NGR	Details	Date
24	183	S	527031 185169	Tunnel	1965
25D	186	S	526491 185006	Tunnel	1991
26D	187	S	526482 185005	Tunnel	1992
27D	187	S	526482 185005	Tunnel	1995
28D	187	S	526483 185005	Tunnel	1970
29D	187	S	526483 185005	Tunnel	1978
30D	187	S	526483 185005	Tunnel	1953
31E	193	S	526312 184950	Tunnel	1986
32E	193	S	526312 184950	Tunnel	1991
60J	193	S	526326 184952	Tunnels	1968
61J	193	S	526326 184952	Tunnels	1957
62J	193	S	526326 184952	Tunnels	1973
63J	193	S	526326 184952	Tunnels	1989
33E	194	S	526315 184950	Tunnel	1971
34E	194	S	526315 184950	Tunnel	1953
35E	194	S	526315 184950	Tunnel	1960
36J	194	S	526320 184952	Tunnel	1994
37E	194	S	526327 184950	Railway Tunnel	1955
38F	233	S	526573 184976	Tunnel	1994
39F	233	S	526573 184976	Tunnel	1974
40F	233	S	526587 184977	Tunnel	1991
41F	233	S	526587 184977	Tunnel	1985
42F	233	S	526588 184976	Tunnel	1967
43F	233	S	526588 184976	Tunnel	1953
44K	233	S	526420 184933	Railway Tunnel	1955
64K	233	S	526419 184933	Tunnels	1957
65L	233	S	526419 184933	Tunnels	1973
66L	233	S	526419 184933	Tunnels	1968
67L	233	S	526419 184933	Tunnels	1989

ID	Distance (m)	Direction	NGR	Details	Date
68	235	S	526842 185044	Tunnel	1874
45G	237	S	526348 184913	Tunnel	1994
46G	238	S	526347 184913	Tunnel	1991
47G	238	S	526347 184913	Tunnel	1986
48G	238	S	526348 184913	Tunnel	1953
49G	238	S	526348 184913	Tunnel	1960
50G	238	S	526348 184913	Tunnel	1971

Any records that have been identified are represented on the Railways and Tunnels Map.

9.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

9.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Type
26	NW	North London line	Rail
26	NW	North London line	Rail
28	NW	North London line	Rail
28	NW	North London line	Rail
182	S	Not given	Rail
182	S	Not given	Rail
186	S	Not given	Rail
186	S	Not given	Rail
232	S	Not given	Rail
232	S	Not given	Rail
236	S	Not given	Rail
236	S	Not given	Rail

Multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels Map.

9.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? Yes

Is the study site within 500m of the route of the Crossrail 1 rail project? No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

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Groundsure Reference: HMD-377-4326248

Your Reference: P170J1222-1

Report Date 5 Oct 2017

Report Delivery Method: Email - pdf

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Yours faithfully,

Jomas Associates Ltd

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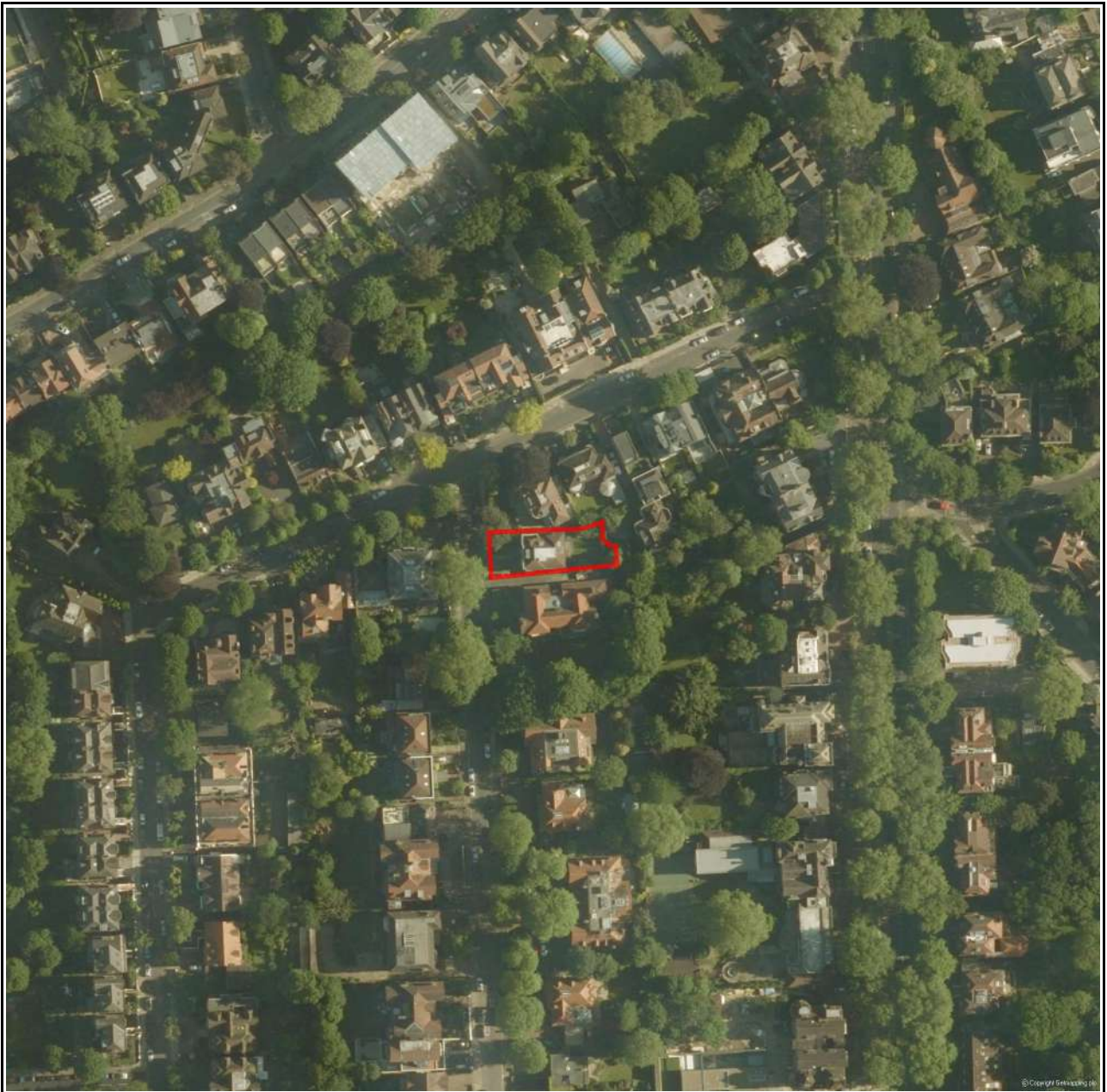
NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 07-Jun-2015
Grid Reference: 526463,185201
Site Size: 0.05ha

Report Reference: HMD-377-4326248
Client Reference: P170J1222-1

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Overview of Findings

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Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	3	18	59
1.2 Additional Information – Historical Tank Database	0	3	4	8
1.3 Additional Information – Historical Energy Features Database	0	0	13	52
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	26
1.6 Potentially Infilled Land	0	3	23	18
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	8
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	1
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites		On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites							
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	0	1	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings							
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	3	Not searched	Not searched	
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	0	0
Section 4: Current Land Use		On-site	0-50m	51-250	251-500		
4.1 Current Industrial Sites Data	0	0	6	Not searched			
4.2 Records of Petrol and Fuel Sites	0	0	0	0			
4.3 National Grid Underground Electricity Cables	0	0	8	8			
4.4 National Grid Gas Transmission Pipelines	0	0	0	0			
Section 5: Geology							
5.1 Are there any records of Artificial Ground and Made Ground present beneath the study site?				No			
5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?				None			
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.							
Section 6: Hydrogeology and Hydrology				0-500m			
6.1 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?				No			
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?				Yes			
		On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)		0	0	0	0	4	3
6.4 Surface Water Abstraction Licences (within 2000m of the study site)		0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)		0	0	0	0	0	3
6.6 Source Protection Zones (within 500m of the study site)		0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer		0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)		1	0	0	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Is there any Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site?	No	No	No	No	No	No
6.10 Detailed River Network entries within 500m of the site	0	0	0	0	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 7: Flooding	
7.1 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?	No
7.2 Are there any Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site?	No
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	Very Low
7.4 Are there any Flood Defences within 250m of the study site?	No
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Limited potential
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	Low

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	2
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	2
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	1	2
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

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

Section 9: Natural Hazards

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

Section 10: Mining

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