

No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only.

LEGEND

PLANNING APPLICATION BOUNDARY

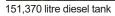
This drawing is the property of Exterior Architecture Ltd.





B. Site Photographs







Acid and fabric softener in 25 litre containers.



Boiler house chimney stack. Hazardous substance storage in yellow bund.



Site Boundary



Concrete plints in central area of the Site.



Project Details

WIE16172-100: Holloway Prison, Parkhurst Road, London N7 0NU

Figure Title

Figure Ref Date

File Location \\s-I

WIE16172-100_GR_PERA_B1A September 2019

Figure B1: Site Photographs

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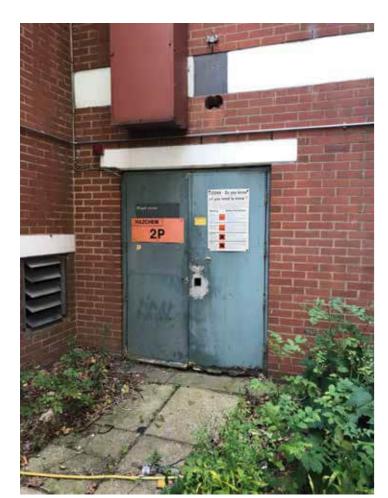
Contents of yellow bund, including acid, water treatment chemicals and herbicides.



Electrical waste coffins on north-eastern boundary



IBC of unknown contents.



Plant room in the southeast of the Site.



Site entrance.



Project Details

WIE16172-100: Holloway Prison, Parkhurst Road, London N7 0NU

Figure Title Figure B2: Site Photographs

Figure Ref Date

File Location

September 2019

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WIE16172-100_GR_PERA_B2A

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C. Ground Gas Risk Assessment

Table C.1:Waterman Ground Gas Risk Assessment Tool

		Assessment	Impact on ground gas risk to completed		
Parameter	Select parameter	score	development	Reasoning	Supporting guidance and reference
Is there an existing Ground Investigation report for the Site?	No	0	Refer to available online resources i.e. BGS online	Information from online resources such as the Groundsure/Landmark Environmental report and BGS datasets will provide a general understanding of the likely ground conditions at the Site.	
Is the Site within 20m of an area of former coal mining or landfilling?	No	0	Reduces risk		The Coal Authority: Risk Based Approach to Development Management; Guidance for Developers (2017) [Section 2.2, Page 7] CL.AIRE: Research Bulletin RB17 A Pragmatic Approach to Ground Gas Risk Assessment (November 2012) [Section 3, Page 3] EPG: Ground Gas Information Sheet 3 Screening approach for landfill gas migration around landfill sites (November 2018) [Page 2]
Is the Site in an area at risk of radon?	No	0	No impact on risk	The proposed development is unlikely to include any radon protective measures that could also mitigate ground gas	Building Research Establishment: BRE 211 Radon - Guidance on protective measures for new buildings (Section 5 Page 6)
Primary soil type assessed	Made Ground with low organic content (i.e. bricks, demolition material, crushed concrete sub-base)	1	·	Where organic matter is unlikely to comprise a significant component of Made Ground the methane generation potential is relatively low as material such as brick, glass, concrete and demolition waste (except wood) does not	CL:AIRE: Research Bulletin RB17 A Pragmatic Approach to Ground Gas Risk Assessment (November 2012) [Section 3, Page 3] EPG: A pragmatic approach to ground gas risk assessment for the 21st Century (2011) [Page 2]
Secondary soil type assessed (if assessing multiple strata)	Chalk, Clay or Limestone	0	Reduces risk	Strata of this type do not contain material capable of	CL:AIRE: Research Bulletin RB17 A Pragmatic Approach to Ground Gas Risk Assessment (November 2012) [Section 3, Page 3] EPG: A pragmatic approach to ground gas risk assessment for the 21st Century (2011) [Page 2]
Thickness of Made Ground (if present on-Site)	Under 5m (with average of less than 3m)	0			CL:AIRE: Research Bulletin RB17 A Pragmatic Approach to Ground Gas Risk Assessment (November 2012) (Section 3: Page 4)
Period since Made Ground emplaced (if present on-Site)	Not applicable	0	Reduces risk	Absence of Made Ground reduces risk of petrogenic material beneath the Site	CL:AIRE: Research Bulletin RB17 A Pragmatic Approach to Ground Gas Risk Assessment (November 2012) [Appendix A, Page 10]
Building type	Construction of new buildings	-3	Reduces risk	incorporate gas protection measures directly into the	CIRIA: C665 Assessing Risks Posed by Hazardous Ground Gases to Buildings (2007) [Table 8.6, Page 90] British Standard: BS8485 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings (2015) [Table 86 Page 90]
Development type	Type B: Residential (flats) or public buildings such as hospitals, schools, leisure centres, hotels etc	1	Increases risk		British Standard: BS8485 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings (2015) [Section 7, Page 21
Ground floor slab construction details	Not known	0	Does not reduce risk		CIRIA: C665 Assessing Risks Posed by Hazardous Ground Gases to Buildings (2007) [Table 8.6, Page 90] British Standard: BS8485 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings (2015) [Section 7.2, Page 23]
Development includes a basement?	Not known	0		Where no specific air circulation is available this should be	British Standard: BS8485 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings (2015) [Annex A Page 36] CIEH: The Local Authority Guide to Ground Gas (September 2008) [Section 7 Page 101
If a basement is present, is this structure in contact with groundwater-bearing strata?	Basement not in contact with groundwate	-	Increases risk	A basement present outside of groundwater bearing strata may only include minimal waterproofing with little protection against ground gas (although excavation may have	
Presence of off-Site sources with potential pathway to Site?	No	0		Where no potential off-Site sources exist, or where there is no direct pathway for these gases to migrate to the Site no risk exists.	
In consideration of the above details th	e development is considered to be at	Very Low Risk	for ground gas issues.		
Based on the sensitivity of the end-use			d gas investigation or as		

Based on the sensitivity of the end-use receptor	no further ground gas investigation or assessment required.
FALSE	
FALSE	
FALSE	
FALSE	



D. Consultation Information

- Groundsure Technical Report
- Response from Environmental Health Department



Waterman Infrastructure & Environment

Limited

Report Reference: WTM1-6291218

PICKFORDS WHARF WATERMAN GROUP,

CLINK STREET, LONDON, SE1 9DG Your Reference: WIE16172_REQ99932

Report Date 5 Sep 2019

Report Delivery Email - pdf

Method:

Geo Insight

Address: HMP HOLLOWAY, LONDON, N7 0JP

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159 000, queries: info@groundsure.com quoting the above report reference number

Yours faithfully,

Waterman

Enc.

Groundsure Geo Insight



Geo Insight

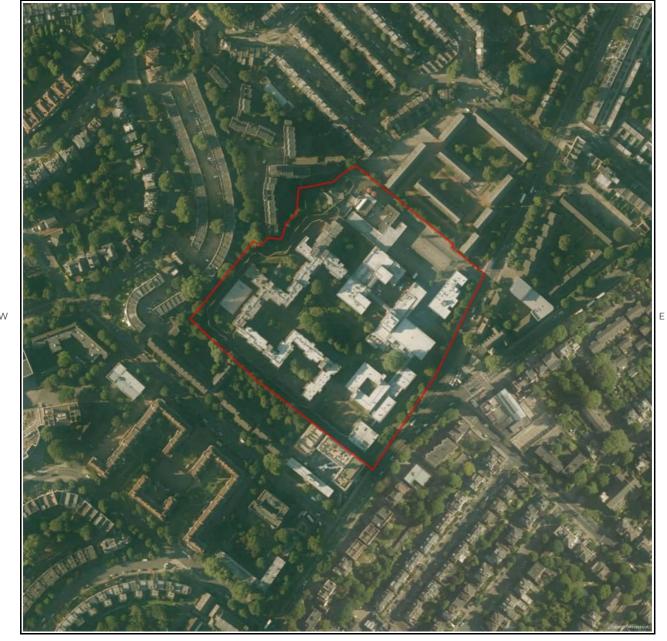
Address: HMP HOLLOWAY, LONDON, N7 0JP

Date: 5 Sep 2019

Reference: WTM1-6291218

Client: Waterman Infrastructure & Environment Limited

NW NE



SW SE SE

Aerial Photograph Capture date: 12-Aug-2016 Grid Reference: 530098,185591 Site Size: 4.1162ha





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Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

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

Section 1: Geology 1:10,000 Scale					
1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No			
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	No			
	1.2.2 Are there any records of landslip within 500m of the study site boundary at 1:10,000 scale?	No			
1.3 Bedrock, Solid Geology and linear	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.				
features	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	No			
Section 2: Geolo	gy 1:50,000 Scale				
Section 2. deolo	gy 1.30,000 Scale				
2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No			
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No			
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	No			
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	No			
	2.2.3 Are there any records of landslip within 500m of the study site boundary?	No			
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No			





Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features

2.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.

2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?

Yes

2.3.3 Are there any records of linear features within 500m of the study site boundary?

No

Section 3: Radon

3. Radon

3.1Is the property in a Radon Affected Area as defined by the Health
The property is not in a Radon Affected Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

Area, as less than 1% of properties are above the Action Level.

3.2Radon Protection

No radon protective measures are necessary.

Section 4: Ground Workings	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	3	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	19
4.3 Current Ground Workings	0	0	0	0	0
Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	0	0
5.2 Coal Mining	0	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	1	0	0	2	3
5.4 Non-Coal Mining*	0	0	0	0	0
5.5 Non–Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0





Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Cornwall and Devon Metalliferous Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
- Ctay Pilling					
Section 6: Natural Ground Subsidence	On-sit	e			
6.1 Shrink-Swell Clay	Modera	te			
6.2 Landslides	Very Lo	W			
6.3 Ground Dissolution of Soluble Rocks	Negligib	ole			
6.4 Compressible Deposits	Negligib	ole			
6.5 Collapsible Deposits	Very Lo	W			
6.5 Running Sand	Very Lo	W			
Section 7: Borehole Records	On-si	te	0-50m	5	1-250
7 BGS Recorded Boreholes	1		4		18
Section 8: Estimated Background Soil Chemistry	On-si	te	0-50m	5	1-250
8 Records of Background Soil Chemistry	4		2		0
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	0	Not Searched	
9.2 Historical Railway and Tunnel Features	0	0	0	Not Searched	
9.3 Historical Railways	0	0	0	Not Searched	
9.4 Active Railways	0	0	0	Not Searched	
9.5 Railway Projects	0	0	0	0	





1:10,000 Scale Availability







Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	Some deposits are mapped	Full	Full	No coverage
2	0.0	Some deposits are mapped	Full	Full	No coverage
3	428.0	Some deposits are mapped	Full	Full	No coverage
4	444.0	Some deposits are mapped	Full	Full	No coverage

Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

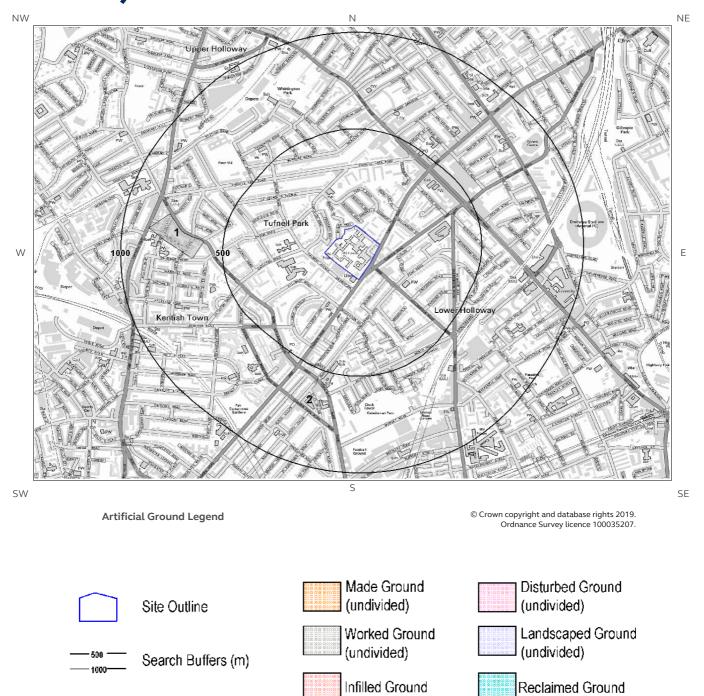
Geology	Full Coverage	Partial Coverage	No Coverage	
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped		
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage	
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped	
Mass Movement	Some deposits are mapped on this tile	-	No coverage	





1 Geology (1:10,000 scale).

1.1 Artificial Ground map (1:10,000 scale)



Infilled Ground





1. Geology 1:10,000 scale

1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.





1.2 Superficial Deposits and Landslips map (1:10,000 scale)



Artificial Ground Legend

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1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale?

Database searched and no data found.

1.2.2 Landslip

Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale?

No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.