

APPENDICES



APPENDIX 1 – FIGURES



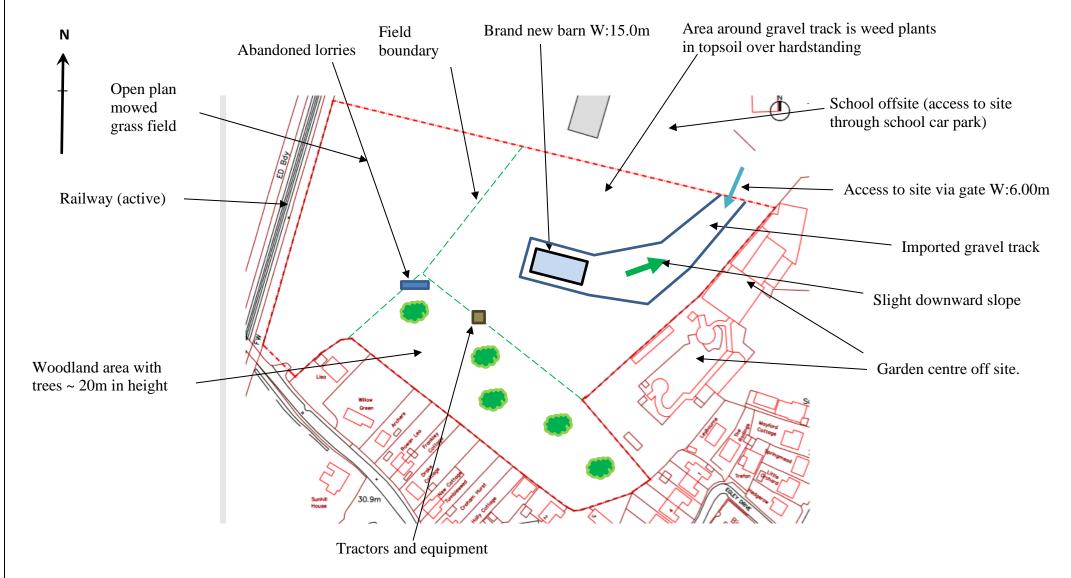
JOMAS ASSOCIATES LTD T: 0843 289 2187

Project Name	Egley Road, Woking	Client	Woking Football Club
Project No.	P1381J1459	Date	15/08/2018
Title	Site Location Plan	Figure No	1

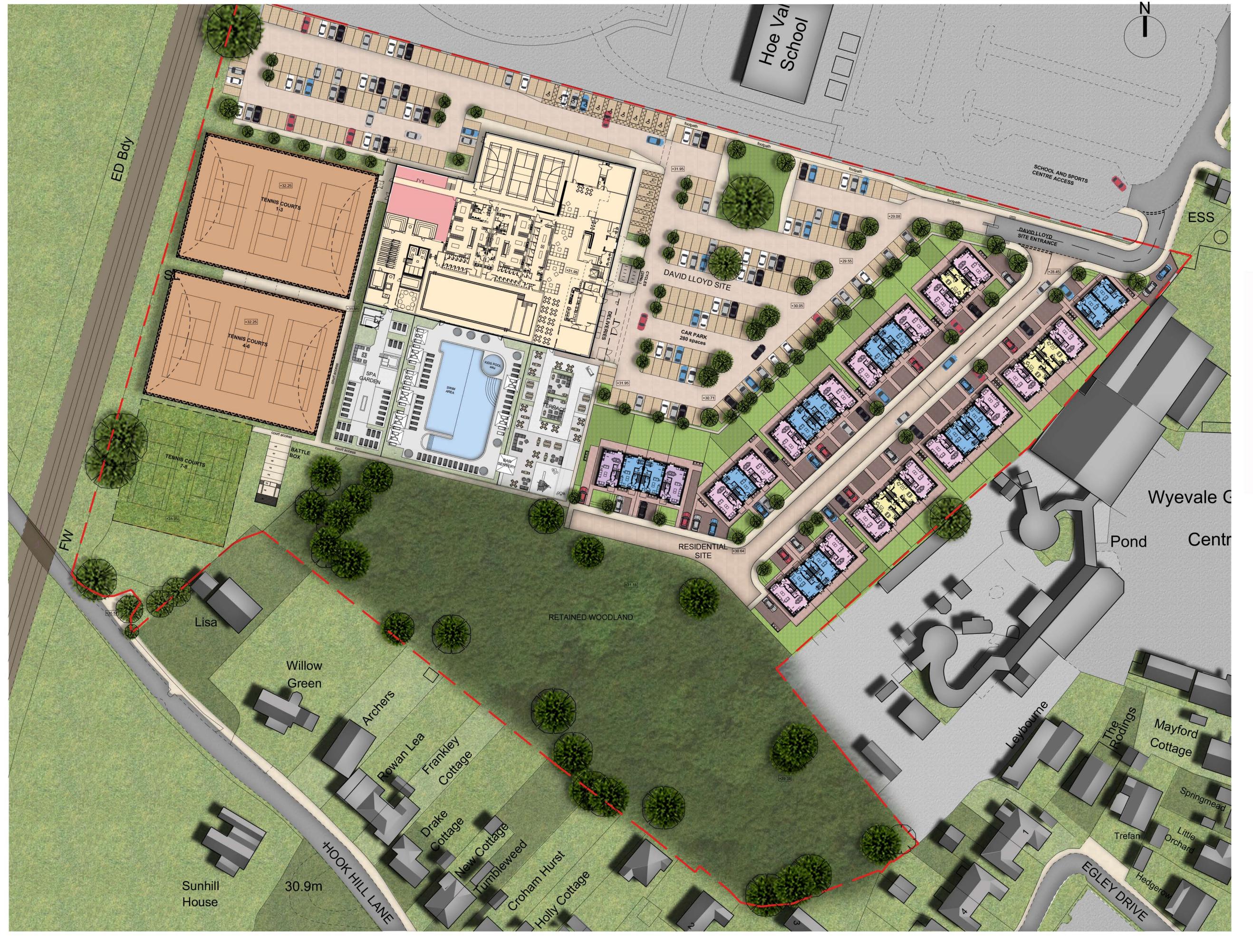




Project Name	Egley Road, Woking	Client	Woking Football Club
Project No.	P1381J1459	Date	14/08/2018
Title	Site Constraints Plan	Prepared By	CLP



Jomas Report P1381J1459 - Proposed Ground Floor Development Plan (Figure 3)



LEGEND

SITE BOUNDARY

(Leisure Site Area: 22,303sqm)

(Residential Site Area: 9,161sqm)

RESIDENTIAL:

0.91 hectares

36no. houses

05 x House Type 1 13 x House Type 2

16 x House Type 3

02 x House Type 4

Gross density:

39 dwellings/ha

9 dwellings/na

58,366 sqft saleable area 90 parking spaces provided

House Type 1 2/3 BEDROOM (4 PEOPLE) TOWNHOUSE (123.2sqm /1326sqft)

House Type 2 3 BEDROOM (6 PEOPLE) TOWNHOUSE (145sqm /1560sqft)

House Type 3 4 BEDROOM (8 PEOPLE) TOWNHOUSE (162.3sqm /1747sqft)

House Type 4 5 BEDROOM (9 PEOPLE) TOWNHOUSE (162.3sqm /1747sqft)

0 10 20m 4

SCALE @ 1:500

LeachRhodes Walker Architects





Project Name	Egley Road, Woking	Client	Woking Football Club
Title	Site Photo Plan	Project	P1381J1459

Photo 1: Photo shows entrance to the site, gravel track to the brand new barn on site.



Photo 2: Photo taken viewing South West showing gravel track, barn and woodland behind to the South West.





Project Name	Egley Road, Woking	Client	Woking Football Club
Title	Site Photo Plan	Project	P1381J1459

Photo 3: Brand new barn development on site.



Photo 4: Photo shows the school offsite to the North where entrance to the site is through the school car park off Egley Road.





Project Name	Egley Road, Woking	Client	Woking Football Club
Title	Site Photo Plan	Project	P1381J1459

Photo 5: Photo taken viewing North East showing the gate entrance from the school car park and a skip containing cardboard and polystyrene.



Photo 6: Tractor and associated equipment located on North East boundary of woodland.





Project Name	Egley Road, Woking	Client	Woking Football Club
Title	Site Photo Plan	Project	P1381J1459

Photo 7: Photo taken viewing East showing the rear of the barn with m high trees and the woodland area to the South West.



Photo 8: Photo taken viewing North West shows the large area of vegetation within topsoil over hardstanding.





Project Name	Egley Road, Woking	Client	Woking Football Club
Title	Site Photo Plan	Project	P1381J1459

Photo 9: Photo taken viewing North East shows gate access W: 6m.



Photo 10: Abandoned lorries and trailers located on North corner of woodland.





Project Name	Egley Road, Woking	Client	Woking Football Club
Title	Site Photo Plan	Project	P1381J1459

Photo 11: Photo shows the woodland area to the South West of the barn.



Photo 12: Electricity stations located offsite to the north of the gate access to site situated in the school car parking area.







Project Name	Egley Road, Woking	Client	Woking Football Club
Title	Site Photo Plan	Project	P1381J1459

Photo 13: Photo shows the railway line at the Western edge of the open mowed grass field.





APPENDIX 2 – GROUNDSURE REPORTS



Jomas Associates Ltd Report Reference: HMD-377-5286457

Lakeside House, 1 Furzeground Way, Stockley Park, UB11 1BD

Your Reference: P1381J1459-1

Report Date 1 Aug 2018

Report Delivery Email - pdf

Method:

Geo Insight

Address: LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 0NJ

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 +44843 289 2187 quoting the above report reference number.

Yours faithfully,

Jomas Associates Ltd

Enc.

Groundsure Geo Insight



Geo Insight

Address: LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 0NJ

Date: 1 Aug 2018

Reference: HMD-377-5286457

Client: Jomas Associates Ltd

NW NE



SW SE

Aerial Photograph Capture date: 20-Apr-2013 Grid Reference: 499416,156437

Site Size: 5.98ha





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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	1	3	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	0
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	0	0	0	0	0
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





LOCATION INTELLIGENCE					
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 Tin Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-sit	ce			
6.1 Shrink-Swell Clay	Negligik	ole			
6.2 Landslides	Very Lo)W			
6.3 Ground Dissolution of Soluble Rocks	Negligik	ole			
6.4 Compressible Deposits	Negligik	ole			
6.5 Collapsible Deposits	Very Lo	W			
6.5 Running Sand	Low				
Section 7: Borehole Records	On-si	te	0-50m	5	1-250
Section 7: Borehole Records 7 BGS Recorded Boreholes	On-si	te	0-50m 0	5	0
7 BGS Recorded Boreholes	0		0		0
7 BGS Recorded Boreholes Section 8: Estimated Background Soil Chemistry	0 On-si		0 0-50m		0
7 BGS Recorded Boreholes Section 8: Estimated Background Soil Chemistry 8 Records of Background Soil Chemistry	0 On-si	te	0 0-50m 0	5	0 1-250 0
7 BGS Recorded Boreholes Section 8: Estimated Background Soil Chemistry 8 Records of Background Soil Chemistry Section 9: Railways and Tunnels	On-si 4 On-site	te 0-50m	0 0-50m 0 51-250	250-500	0 1-250 0
7 BGS Recorded Boreholes Section 8: Estimated Background Soil Chemistry 8 Records of Background Soil Chemistry Section 9: Railways and Tunnels 9.1 Tunnels	On-si 4 On-site	0-50m	0 0-50m 0 51-250	250-500 Not Searched	0 1-250 0
7 BGS Recorded Boreholes Section 8: Estimated Background Soil Chemistry 8 Records of Background Soil Chemistry Section 9: Railways and Tunnels 9.1 Tunnels 9.2 Historical Railway and Tunnel Features	On-site On-site	0-50m 0	0 0-50m 0 51-250 0	250-500 Not Searched	0 1-250 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	407.0	Some deposits are mapped	Full	Full	No coverage
N3	1251.0	Some deposits are mapped	Full	Full	Some deposits are mapped
N4	1356.0	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:

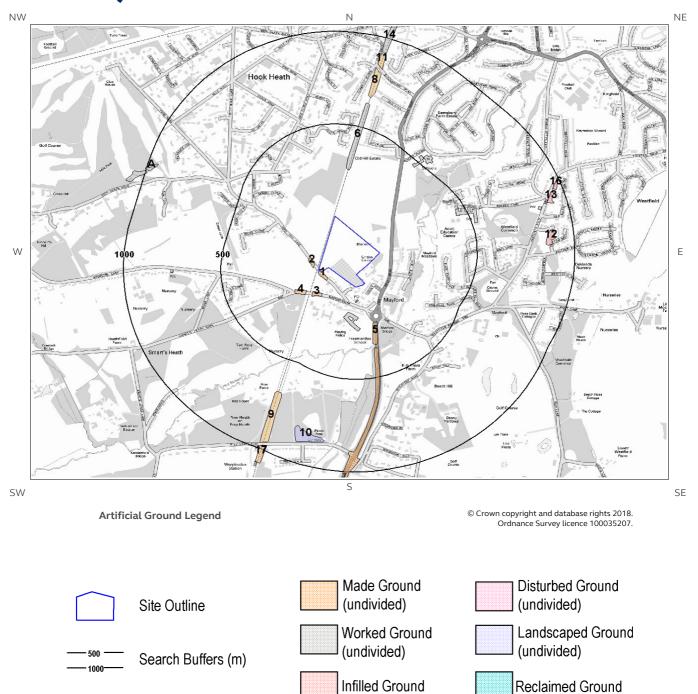
Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial Some deposits are mapped on this tile		-	No deposits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







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.

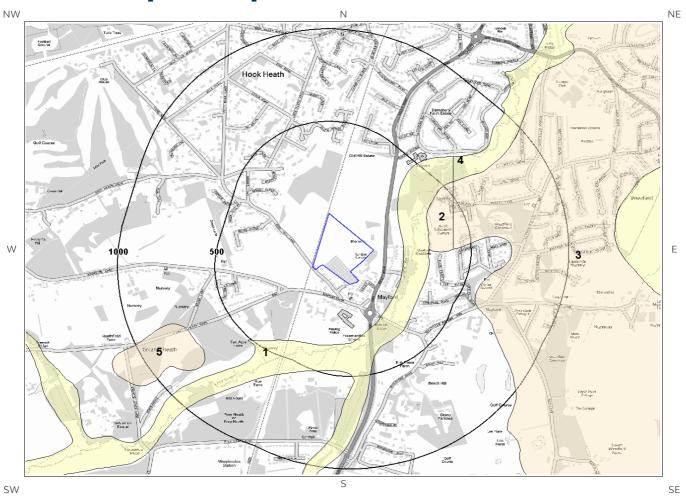
Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	28.0	W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	107.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	124.0	SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
5	209.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	260.0	N	WGR-VOID	Worked Ground (Undivided)	Void
7	343.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit





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



Artificial Ground Legend

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Site Outline



Search Buffers (m)





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?

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	154.0	Е	ALV-XSV	Alluvium - Sand And Gravel	Sand And Gravel
2	283.0	E	KPGR-XSV	Kempton Park Gravel Formation - Sand And Gravel	Sand And Gravel
3	407.0	E	KPGR-XSV	Kempton Park Gravel Formation - Sand And Gravel	Sand And Gravel

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.

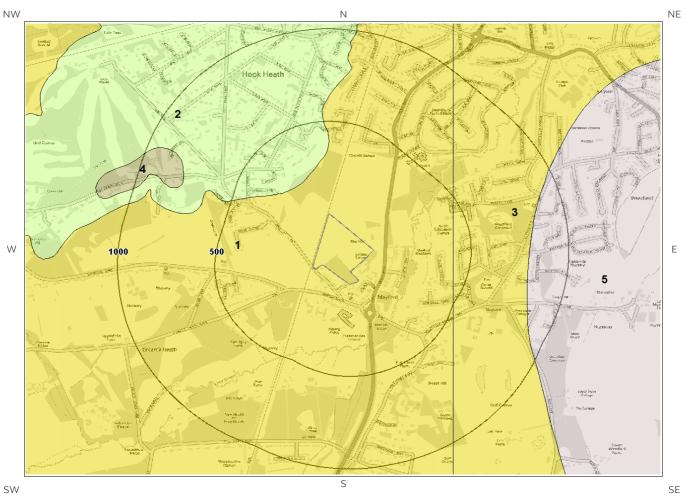
The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

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.





1.3 Bedrock and linear features map (1:10,000 scale)



Bedrock and linear features Legend

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	Site Outline
500 <i></i>	Search Buffers (m)





1.3 Bedrock and linear features

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

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	BGS-SANDU	Bagshot Formation - Sand	Eocene Epoch
2	217.0	NW	WIDS- SANDU	Windlesham Formation - Sand	Eocene Epoch
3	407.0	Е	BGS-SANDU	Bagshot Formation - Sand	Eocene Epoch

1.3.2 Linear features

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

No

Database searched and no data found at this scale.

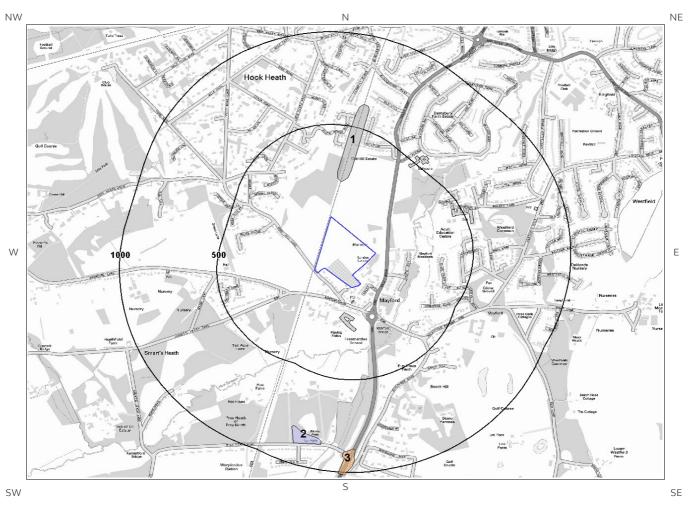
The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as faults. 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.

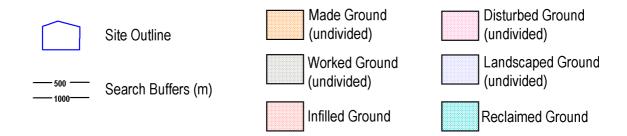




2 Geology 1:50,000 Scale2.1 Artificial Ground map



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2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 285

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary?

Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	198.0	Ν	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

2.1.2 Permeability of Artificial Ground

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

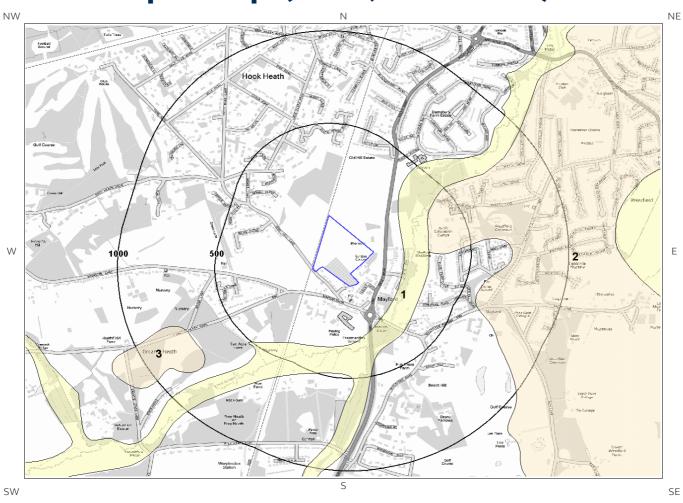
No

Database searched and no data found.





2.2 Superficial Deposits and Landslips map (1:50,000 scale)



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2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

 ID	Distance	Direction	LEX Code Description	Rock Description
1	153.0	E	ALV-XCZSV ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
2	283.0	E	KPGR-XSV KEMPTON PARK GRAVEL MEMBER	SAND AND GRAVEL

2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? No

Database searched and no data found.

2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary?

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 1:50,000 scale.

This Geology shows the main components as discrete layers, there 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.

2.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site boundary?

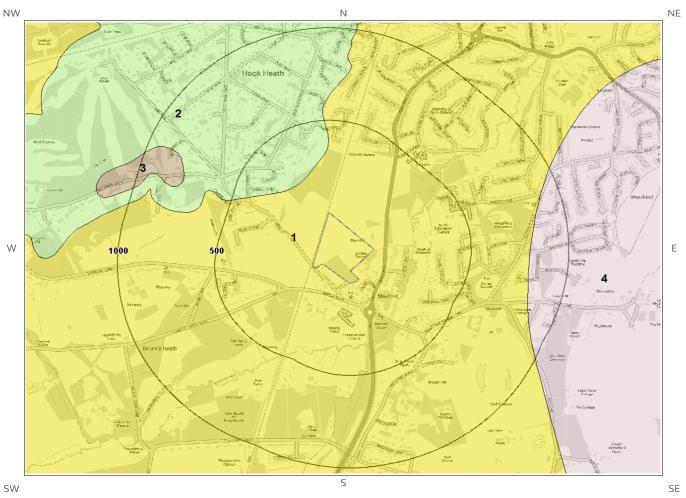
No

Database searched and no data found.





2.3 Bedrock and linear features map (1:50,000 scale)



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2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 285

2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	BGS-S	BAGSHOT FORMATION - SAND	YPRESIAN
2	218.0	NW	WIDS-XSZC	WINDLESHAM FORMATION - SAND, SILT AND CLAY	-

2.3.2 Permeability of Bedrock Ground

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

Yes

Distanc e	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	High	High

2.3.3 Linear features

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

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 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as faults. 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 nation wide coverage.





3 Radon Data

3.1 Radon Affected Areas

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

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

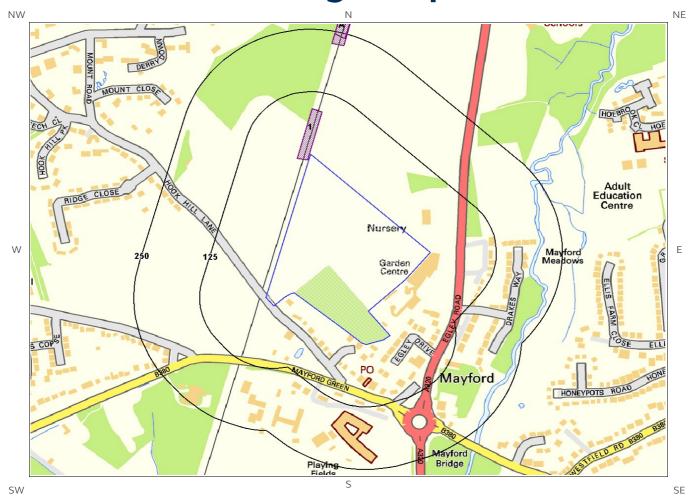
3.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.



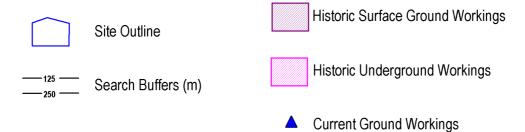


4 Ground Workings map



Ground Workings Legend

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4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1	1.0	W	499364 156673	Cuttings	1913
2A	226.0	N	499476 157060	Cuttings	1913
3A	226.0	N	499476 157060	Cuttings	1938
4A	241.0	N	499480 157064	Cuttings	1955

4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary?

No

Database searched and no data found.

4.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary?

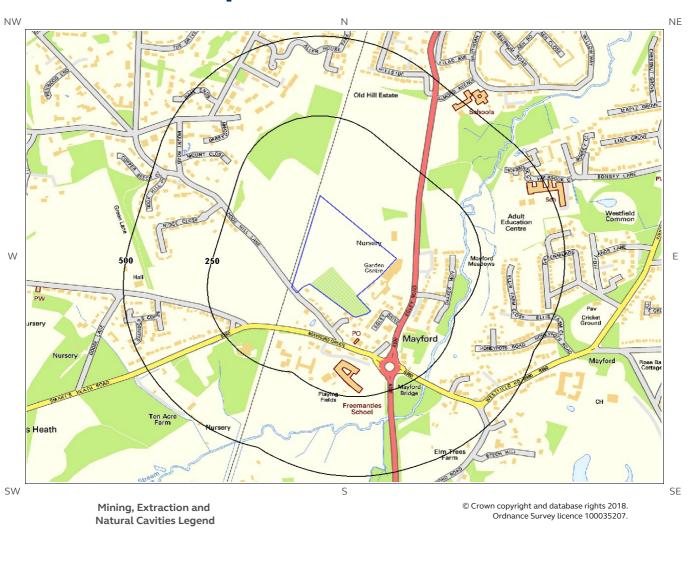
No

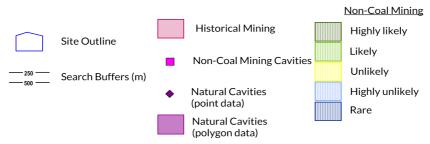
Database searched and no data found.





5 Mining, Extraction & Natural Cavities map









5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary?

No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.





5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary?

No

Database searched and no data found.

5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary?

No

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary?

No

Database searched and no data found.

5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary?

Nο

Database searched and no data found.

5.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level..

Are there any Tin Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.





5.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

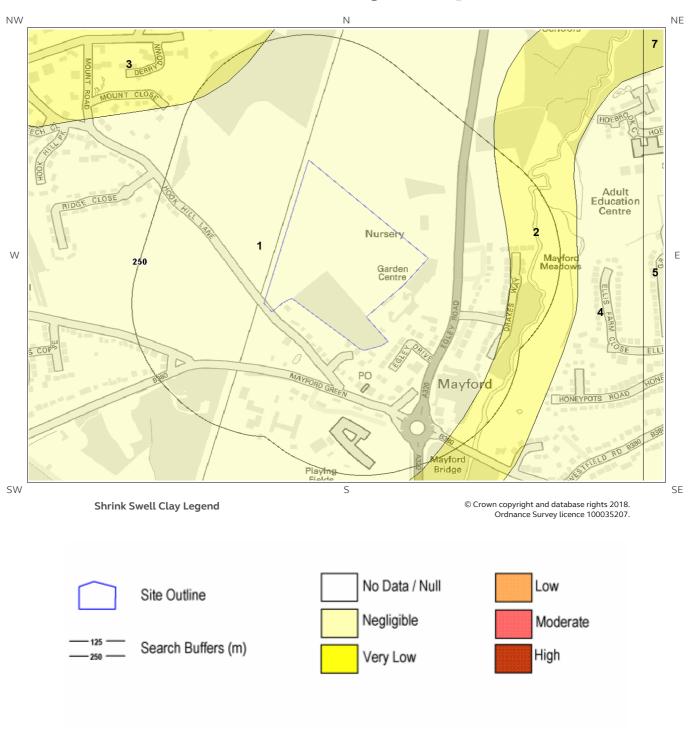
No

Database searched and no data found.





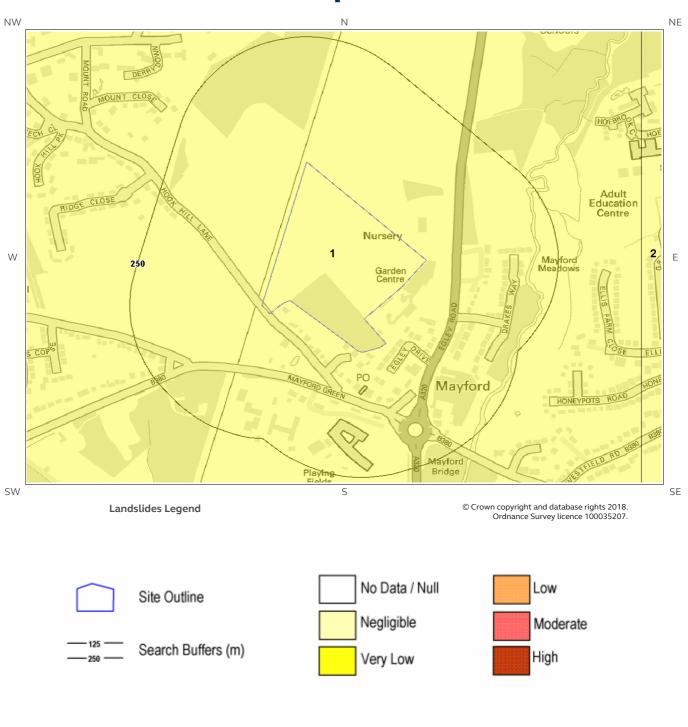
6 Natural Ground Subsidence6.1 Shrink-Swell Clay map







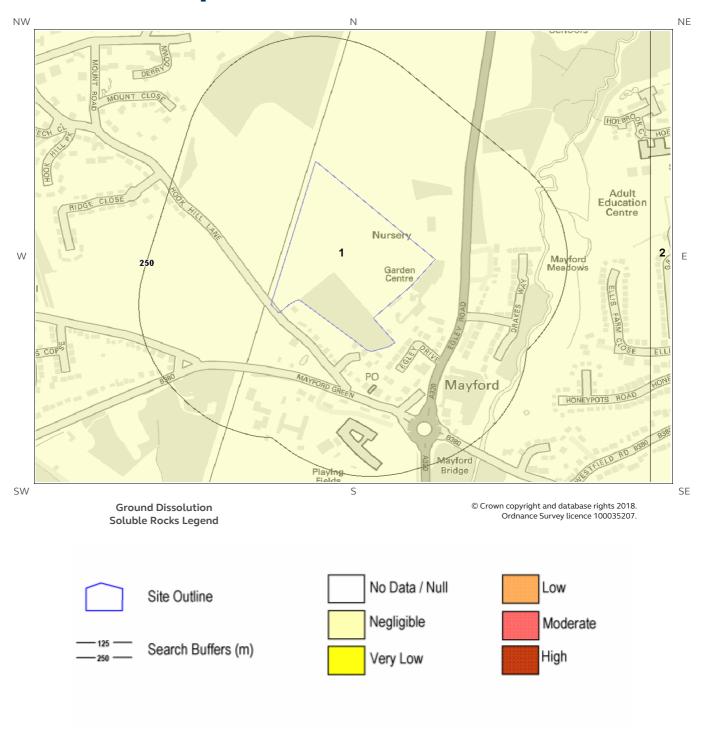
6.2 Landslides map







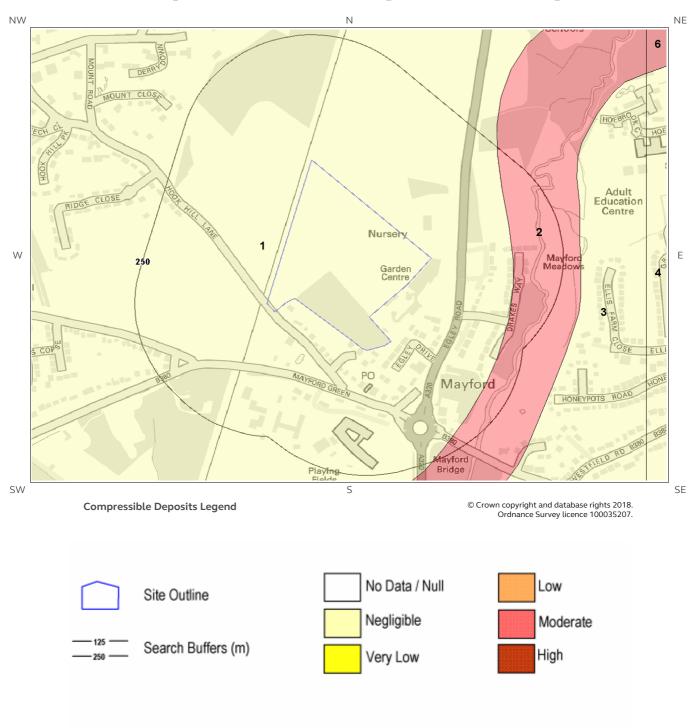
6.3 Ground Dissolution of Soluble Rocks map







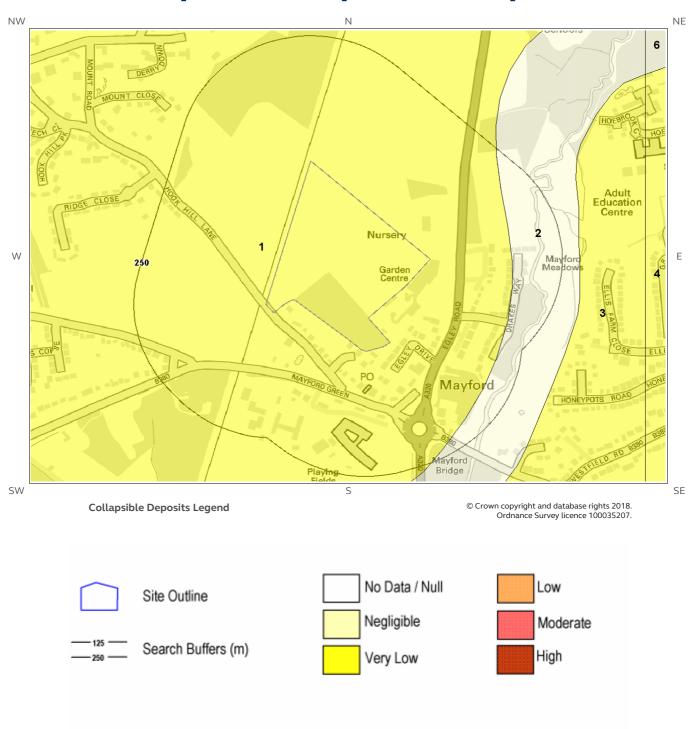
6.4 Compressible Deposits map







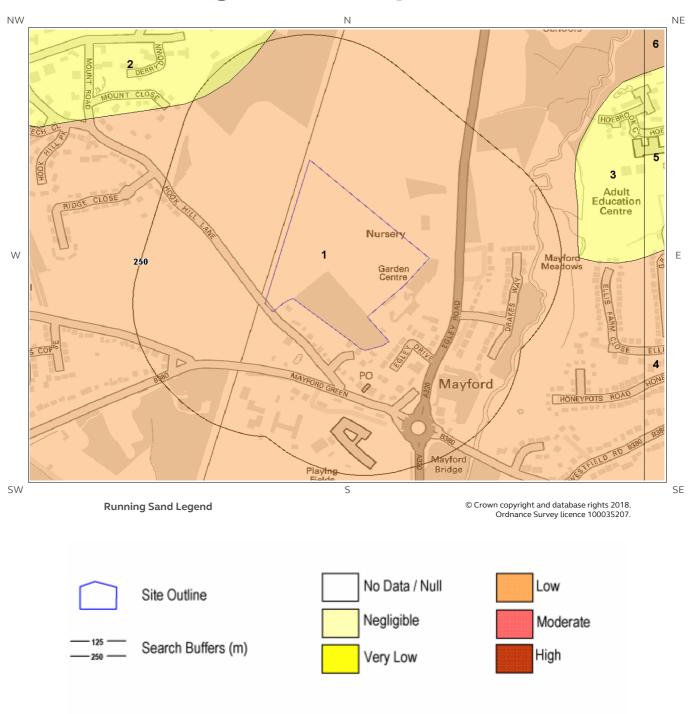
6.5 Collapsible Deposits map







6.6 Running Sand map







6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site** boundary?

Low

6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

6.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

^{*} This includes an automatically generated 50m buffer zone around the site





6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

6.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

ID	Distanc (m)	^e Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

6.6 Running Sands

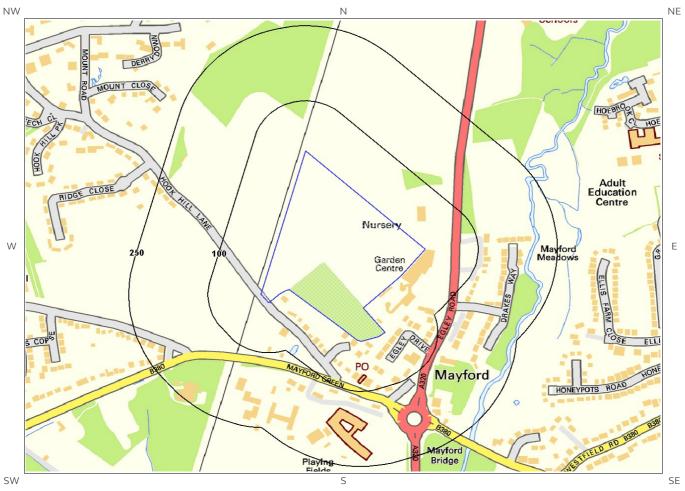
The following Running Sands information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build - consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property - no significant increase in insurance risk due to running sand problems is likely.





7 Borehole Records map



Borehole Records Legend

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7 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:	0
Database searched and no data found.	





8 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

/

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

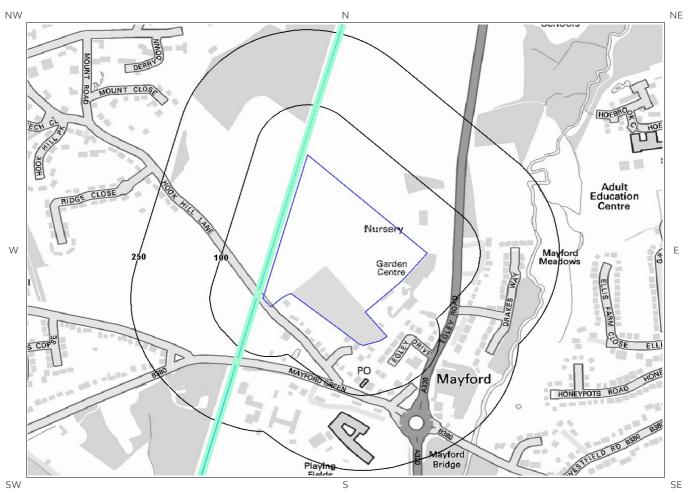
Distar	nce (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
	.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
-	.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
-	.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
(.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg

^{*}As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.



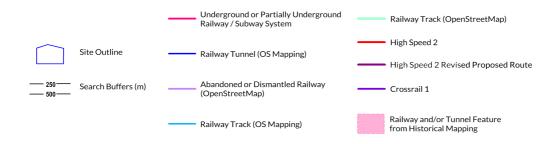


9 Railways and Tunnels map



Railways and Tunnels Legend

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9 Railways and Tunnels

9.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary?

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

No No

Database searched and no data found.

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

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary?

No

Have any other railway tunnels been identified within 250m of the site boundary?

No

Database searched and no data found.

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

9.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary?

No

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

Database searched and no data found.

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	Туре
8	W	Portsmouth Direct Line	Rail
8	W	Portsmouth Direct Line	Rail
11	W	Not given	Multi Track
11	W	Not given	Multi Track
12	W	Not given	Multi Track
12	W	Not given	Multi Track
15	W	Not given	Rail
15	W	Not given	Rail
134	SW	Not given	Multi Track
134	SW	Not given	Multi Track

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?

No

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.





Contact Details

Jomas Associates Ltd Telephone: +44843 289 2187 rs@jomasassociates.com



British Geological Survey Enquiries

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

Email:enquiries@bgs.ac.uk Web:www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries

British Gypsum

British Gypsum Ltd East Leake Loughborough Leicestershire LE12 6HX



Geological Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL

British

The Coal Authority

200 Lichfield Lane Mansfield Notts NG18 4RG Tel: 0345 7626 848 DX 716176 Mansfield 5 www.coal.gov.uk



Public Health England

Public information access office Public Health England, Wellington House 133-155 Waterloo Road, London, SE1 8UG

$\label{lem:https://www.gov.uk/government/organisations/public-health-england$

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



Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane Brierley Hill, West Midlands DY5 3LH Tel: +44 (0) 1384 262 000

Email:**enquiries.gs@jpb.co.uk** Website: **www.jpb.co.uk**



Ordnance Survey

Adanac Drive, Southampton SO16 0AS

Tel: 08456 050505

Website: http://www.ordnancesurvey.co.uk/



Getmapping PLC

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

Website: http://www1.getmapping.com/







Peter Brett Associates

Caversham Bridge House Waterman Place

Waterman Place
Reading
Berkshire RG1 8DN
Tel: +44 (0)118 950 0761 E-mail:reading@pba.co.uk
Website:http://www.peterbrett.com/home



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Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link: https://www.groundsure.com/terms-and-conditions-may25-2018



Jomas Associates Ltd

Lakeside House, 1 Furzeground Way, Stockley Park, UB11 1BD

Groundsure

HMD-377-5286456

Reference:

Your Reference: P1381J1459-1

Report Date 1 Aug 2018

Report Delivery Email - pdf

Method:

Enviro Insight

Address: LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 0NJ

Dear Sir/ Madam,

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

If you need any further assistance, please do not hesitate to contact our helpline on +44843 289 2187 quoting the above report reference number.

Yours faithfully,

Jomas Associates Ltd

Groundsure Enviroinsight



Groundsure Enviro Insight

Address: LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 0NJ

Date: 1 Aug 2018

Reference: HMD-377-5286456

Client: Jomas Associates Ltd

NW NE



Aerial Photograph Capture date: 20-Apr-2013

Grid Reference: 499416,156437

Site Size: 5.98ha

Report Reference: HMD-377-5286456 Client Reference: P1381J1459-1

SE





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Overview of Findings

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

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	2	5	23	29
1.2 Additional Information – Historical Tank Database	0	0	0	2
1.3 Additional Information – Historical Energy Features Database	0	0	11	7
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	6	4
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	1	4	7
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	0
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	1	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





On-site	0-50m	51-250	251-500	501-1000	1000- 1500
0	0	0	0	0	Not searche
0	0	0	0	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	Not searched	Not searche
0	0	0	0	0	2
On-site	е	0-50m	51-25	0 2	51-500
0		0	16	No	ot searched
0		0	1		1
0		0	0		0
0		0	0		0
None identified None identified					
		None ic	lentified		
		None id	lentified		
			lentified		
		0-5			
		0-5i	00m		
On-site	0-50m	0-5i	00m tified	501-1000	1000- 2000
On-site	0-50m 0	0-50 Iden Iden	00m tified	501-1000	
		0-50 Iden Iden 51-250	00m tified tified 251-500		2000
0	0	0-50 Iden Iden 51-250	00m tified tified 251-500	0	6
0	0	0-50 Iden Iden 51-250 0	00m tified tified 251-500 0	0	6
0 0	0 0	0-50 Iden Iden 51-250 0	251-500 0 0	0 0	6 6 0 Not searche
	0 0 0 0 On-sitt	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0





LOCATION INTELLIGENCE						
Section 6: Hydrogeology and Hydrology	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	10	86	Not searched	Not search
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not search
Section 7: Flooding						
7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site			lder	ntified		
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site			Ider	ntified		
7.3 Risk of flooding from $$ Rivers and the Sea (RoFRaS) rating for the study site			Ver	y Low		
7.4 Flood Defences within 250m of the study site			None i	dentified		
7.5 Areas benefiting from Flood Defences within 250m of the study site			None i	dentified		
7.6 Areas used for Flood Storage within 250m of the study site	None identified					
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site			Limited	potential		
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas			L	OW		
Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	5	1
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	1	0	4
8.7 Records of Local Nature Reserves (LNR)	0	0	1	0	0	0
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	1
8.14 Records of Green Belt land	1	0	0	0	0	3

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Low	
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Negligible	
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low	
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible	
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible	
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low	
9.1.6 Maximum Running Sand hazard rating identified on the study site	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?

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?

The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

No radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	None identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified





Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

Note: Maps

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

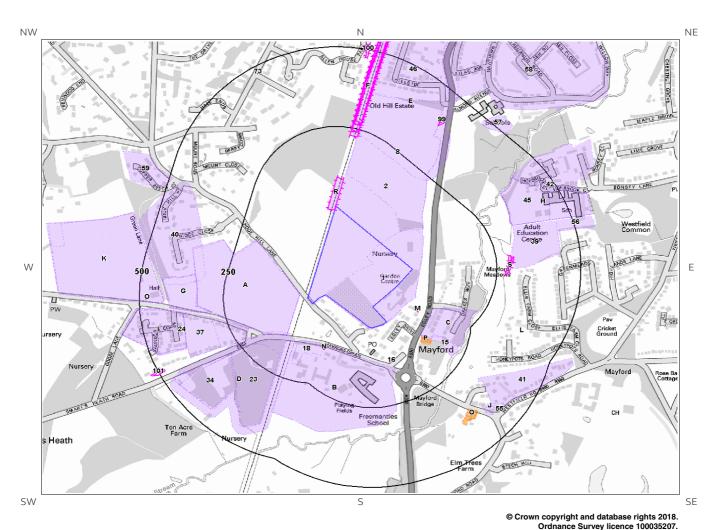
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

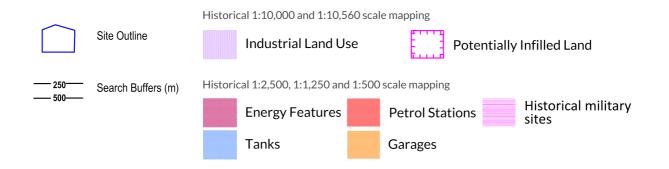
All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.





1. Historical Land Use









59

1. Historical Industrial Sites

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

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

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

ID	Distance [m]	Direction	Use	Date
1	0	On Site	Nursery	1895
2	0	On Site	Nursery	1938
3R	1	W	Cuttings	1913
4A	25	W	Nursery	1955
5A	26	W	Nursery	1938
6A	26	W	Nursery	1913
7A	26	W	Nursery	1938
8	64	NE	Nursery	1955
9B	97	S	Industrial School	1913
10B	97	S	Industrial School	1938
11B	97	S	Industrial School	1895
12C	105	Е	Nursery	1938
13C	106	SE	Nursery	1913
14C	106	SE	Nursery	1938
15	112	Е	Nursery	1955
16	113	S	Smithy	1871
17D	116	SW	Nurseries	1913
18	122	S	Unspecified Depot	1989
19D	139	SW	Nurseries	1989
20D	139	SW	Nurseries	1982
21D	139	SW	Nurseries	1975
22D	141	SW	Nurseries	1938
23	186	SW	Nurseries	1938
24	200	SW	Nursery	1913
25E	221	NE	Nursery	1913
26E	221	NE	Nursery	1895
27F	226	N	Cuttings	1913
28F	226	N	Cuttings	1938
29F	240	N	Cuttings	1938
30F	241	N	Cuttings	1955
31F	264	N	Cuttings	1895
32F	271	N	Cuttings	1871
33G	287	W	Nursery	1938
34	287	SW	Nurseries	1955





LOCATION INTELLIGENCE	•			
35G	291	W	Nursery	1913
36G	291	W	Nursery	1938
37	291	W	Nursery	1895
38G	291	W	Nursery	1955
39	292	E	Nursery	1913
40	314	W	Nursery	1895
41	322	SE	Nursery	1913
42	323	NE	Nursery	1913
43H	324	NE	Nurseries	1938
44H	324	NE	Nurseries	1938
45	326	NE	Nurseries	1955
46	369	N	Nursery	1938
471	372	W	Nurseries	1938
481	373	W	Nurseries	1938
491	373	W	Nurseries	1955
50J	384	SE	Smithy	1895
51J	398	SE	Smithy	1913
52K	425	W	Nursery	1938
53K	428	W	Nursery	1938
54K	428	W	Nursery	1955
55	429	SE	Smithy	1871
56	447	E	Nursery	1913
57	477	NE	Nursery	1913
58	480	NE	Nursery	1913
59	491	W	Nursery	1895

1.2 Additional Information - Historical Tank Database

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

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

2

ID	Distance (m)	Direction	Use	Date
60L	376	SE	Unspecified Tank	1916
61L	376	SE	Unspecified Tank	1934

1.3 Additional Information - Historical Energy Features Database

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





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

18

				_
ID	Distance (m)	Direction	Use	Date
62M	93	SE	Electricity Substation	1987
63M	95	E	Electricity Substation	1993
64M	95	Е	Electricity Substation	1997
65M	95	Е	Electricity Substation	1995
66M	95	E	Electricity Substation	1995
67N	132	SW	Electricity Substation	1970
68N	134	SW	Electricity Substation	1987
69N	134	SW	Electricity Substation	1993
70N	134	SW	Electricity Substation	1995
71N	134	SW	Electricity Substation	1997
72N	134	SW	Electricity Substation	1995
73	474	NW	Electricity Substation	1990
740	475	W	Electricity Substation	1995
750	475	W	Electricity Substation	1995
760	477	W	Electricity Substation	1989
770	477	W	Electricity Substation	1990
780	477	W	Electricity Substation	1989
790	477	W	Electricity Substation	1989

1.4 Additional Information - Historical Petrol and Fuel Site Database

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

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

0

Database searched and no data found.

1.5 Additional Information - Historical Garage and Motor Vehicle Repair Database

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

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

10

ID	Distance (m)	Direction	Use	Date
80P	113	SE	Garage	1987
81P	115	SE	Garage	1993
82P	115	SE	Garage	1995





EOCATION INTELLIGENCE				
83P	115	SE	Garage	1995
84P	115	SE	Garage	1997
85P	115	SE	Garage	1970
86Q	365	SE	Garage	1970
87Q	365	SE	Garage	1994
88Q	365	SE	Garage	1996
89Q	371	SE	Garage	1988

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary:

0

Database searched and no data found.

1.7 Potentially Infilled Land

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

12

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

ID	Distance(m)	Direction	Use	Date
90R	1	W	Cuttings	1913
91F	226	N	Cuttings	1938
92F	226	N	Cuttings	1913
93F	240	N	Cuttings	1938
94F	241	N	Cuttings	1955
95F	264	N	Cuttings	1895
96F	271	N	Cuttings	1871
97S	274	Е	Pond	1895
985	283	Е	Pond	1989
99	389	NE	Pond	1895
100	475	N	Ponds	1938
101	481	SW	Pond	1895

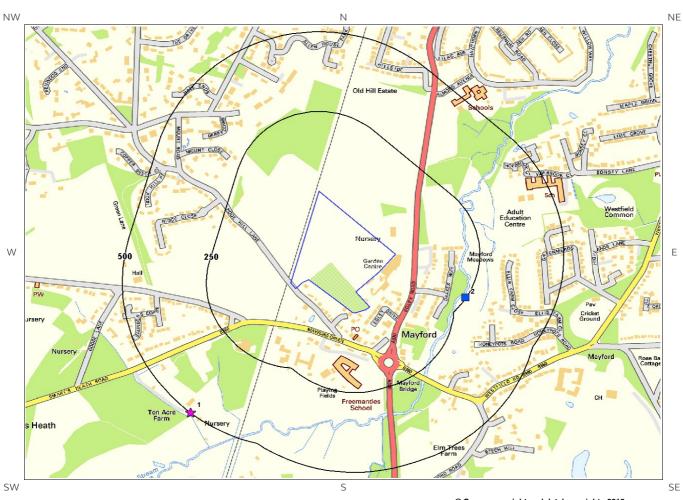
Report Reference: HMD-377-5286456 Client Reference: P1381J1459-1

15





2. Environmental Permits, Incidents and Registers Map



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RAS 3 & 4 Authorisations

Recorded Pollution Incident





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

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales an Authorities reveal the following information:	d Local
2.1.1 Records of historic IPC Authorisations within 500m of the study site:	
	0
Database searched and no data found.	
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:	
	0
Database searched and no data found.	
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) 500m of the study site:) within
	0
Database searched and no data found.	
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:	
	0
Database searched and no data found.	
2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:	
Database searched and no data found.	0





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

2.1.	o Records	S OI Part A(Z) and Part	. D Activities and Emorcements within 5	oom of the study site.	
						0
			[Database searched and no data found.		
2.1.	7 Records	s of Catego	ory 3 or 4 Ra	adioactive Substances Authorisations:		
			r	Database searched and no data found.		0
			L	Jalabase searched and no data round.		
2.1.	8 Records	s of License	ed Discharg	e Consents within 500m of the study sit	e:	
						1
			l Discharge Registers M	e Consents records are represented as ap:	s points on the Enviror	nmental
ID	Distance (m)	Direction	NGR	Detail	s	
2	248	SE	499800 156300	Address: DEVELOPMENT EAST OF DRAKES WAY, EGL, DEVELOPMENT EAST OF DRAKES WAY, EGLEY ROAD, MAYFORD, WOKING, SUR, REY Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CTWC.1715 Permit Version: 1	Receiving Water: HOE ST Status: REVOKED - UNSPI Issue date: 07/07/19 Effective Date: 07-Jul- Revocation Date: 18/10	ECIFIED 87 1987
		s of Water study site:	Industry Re	eferrals (potentially harmful discharges	to the public sewer) with	nin
						0
			[Database searched and no data found.		
2.1. site		ds of Plann	ing Hazard	ous Substance Consents and Enforceme	ents within 500m of the	study
]	Database searched and no data found.		0





2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

1

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details			
1	500	SW	498983 155939	Incident Date: 20-Nov-2002 Incident Identification: 122004 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)		

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

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

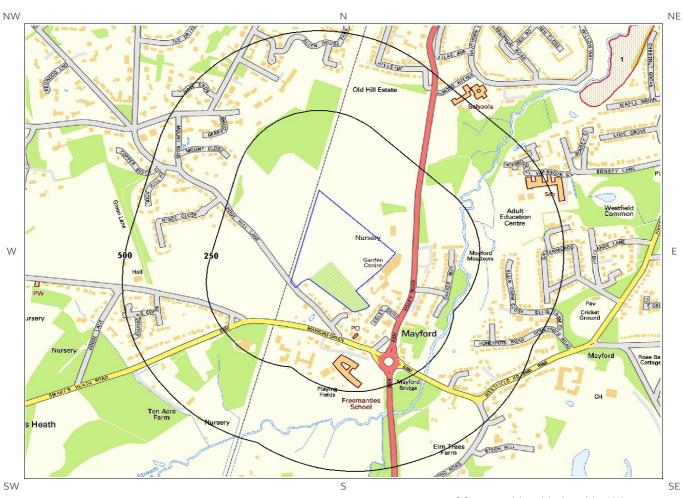
Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0

Database searched and no data found.

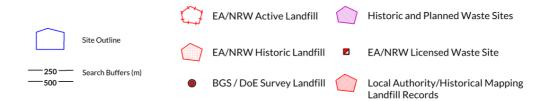




3. Landfill and Other Waste Sites Map



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3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1	Records from	Environment	Agency/Natural	Resources	Wales	landfill	data	within	1000m	of th	ne study	į
site:												

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

2

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Detail	s
1	732	NE		Site Address: Westfield Tip, Woking Waste Licence: - Site Reference: WO/15, WO/15/LOC, WO/14 Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1970 Last Recorded: 31-Dec-1979
Not shown	1399	S		Site Address: Whitmoor Common, Burdenshots Road, Worplesdon, Woking, Surrey Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

0

Database searched and no data found.





3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

0

Database searched and no data found.

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

2

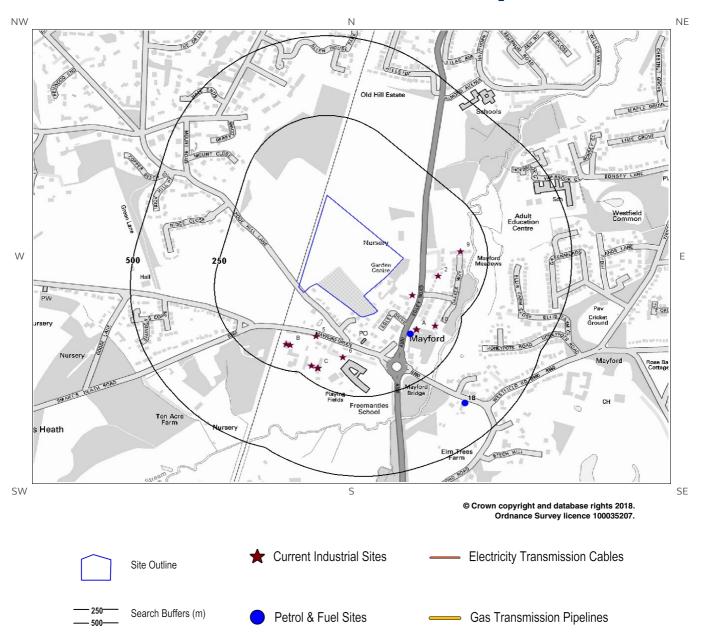
The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Det	ails
Not shown	1303	SW	498256 155541	Site Address: P S James & Partner, Unit 47, Martlands Ind Est, Smart Heath Lane, Mayford, Woking, Surrey, GU22 ORQ Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JAM001 EPR reference: EA/EPR/RP3293EY/S002 Operator: P S James and Partner Waste Management licence No: 83144 Annual Tonnage: 5000.0	Issue Date: 16/05/1994 Effective Date: - Modified: - Surrendered Date: 06/12/2001 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: P S James Martlands Ind Est Mayford Gu22 Correspondence Address: -
Not shown	1329	SW	498189 155587	Site Address: A R G Jones T/A Hybrid Salvage, Units 9, 6A&6B Martlands Industrial Estate, Smarts Heath Lane, Worplesdon, Woking, Surrey, GU22 0RG Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HYB001 EPR reference: EA/EPR/RP3593EL/S002 Operator: A R G Jones T/A Hybrid Salvage Waste Management licence No: 83141 Annual Tonnage: 1200.0	Issue Date: 30/01/1995 Effective Date: - Modified: - Surrendered Date: 14/08/2003 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Hybrid Salvage, Martlands Ind Est, GU22 Correspondence Address: -





4. Current Land Use Map







4. Current Land Uses

4.1 Current Industrial Data

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

16

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

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1	94	SE	Electricity Sub Station	499618 156321	GU22	Electrical Features	Infrastructure and Facilities
2	115	SE	Lee Air Services	499694 156380	8 Havelock Cottages, Egley Road, Woking, GU22 ONQ	Aircraft Charters	Contract Services
3A	127	SE	Practical Car & Van Rental	499630 156213	Egley Road, Woking, GU22 0NQ	Vehicle Hire and Rental	Hire Services
4A	129	SE	Mayford Motors Ltd	499631 156213	Egley Road, Woking, GU22 0NQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
5	130	SW	Electricity Sub Station	499332 156192	GU22	Electrical Features	Infrastructure and Facilities
6	139	SW	Electricity Sub Station	499411 156126	GU22	Electrical Features	Infrastructure and Facilities
7B	168	S	Council Depot	499256 156165	GU22	Container and Storage	Transport, Storage and Delivery
8B	170	S	Mayford Joinery	499243 156167	The Mayford Centre, Mayford Green, Woking, GU22 OPP	General Construction Supplies	Industrial Products
9	170	E	Micromed	499761 156458	11, Drakes Way, Woking, GU22 0NX	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
10	176	E	Barnabas Communicati ons	499686 156224	Barnabus Cottage, Egley Road, Woking, GU22 0NQ	Radar and Telecommunications Equipment	Industrial Products
11C	205	SW	Guildford Television Services	499337 156092	Unit 103b The Mayford Centre, Mayford Green, Woking, GU22 0PP	Electrical Equipment Repair and Servicing	Repair and Servicing
12C	205	SW	Tenring Sports Services	499337 156092	Unit G5 The Mayford Centre, Mayford Green, Woking, GU22 0PP	Arms and Ammunition	Industrial Products
13C	205	SW	Bunny's Bolts	499337 156092	The Depot The Mayford Centre, Mayford Green, Woking, GU22 0PP	General Construction Supplies	Industrial Products
14C	205	SW	Renaissance Corporate Graphics	499337 156092	Unit G/21 The Mayford Centre, Mayford Green, Woking, GU22 0PP	Signs	Industrial Products
15C	206	SW	Pollution Monitors Ltd	499337 156092	Unit G3 The Mayford Centre, Mayford Green, Woking, GU22 0PP	Measurement and Inspection Equipment	Industrial Products
16C	211	SW	The Mayford Business	499319 156100	Managers Office The Mayford Centre, The	Business Parks and Industrial Estates	Industrial Features





ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
			Centre		Mayford Centre, Woking, GU22 0PP		

4.2 Petrol and Fuel Sites

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

2

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

ID	Distance (m)	Directio n	NGR	Company	Address	LPG	Status
17A	119	SE	499612 156199	Obsolete	Mayford Motors, Egley Road, Egley Road, Mayford, Woking, Surrey, GU22 0NQ	Not Applicable	Obsolete
18	387	SE	499774 155982	Obsolete	Runnymede Filling Station, Guildford Road, Guildford Road, Mayford, Woking, Surrey, GU22 9QX	Not Applicable	Obsolete

4.3 National Grid High Voltage Underground Electricity Transmission Cables

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

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

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

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

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

Database searched and no data found.

Report Reference: HMD-377-5286456 Client Reference: P1381J1459-1 \cap

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5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

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

5.2 Superficial Ground and Drift Geology

Database searched and no data found.

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

5.3 Bedrock and Solid Geology

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

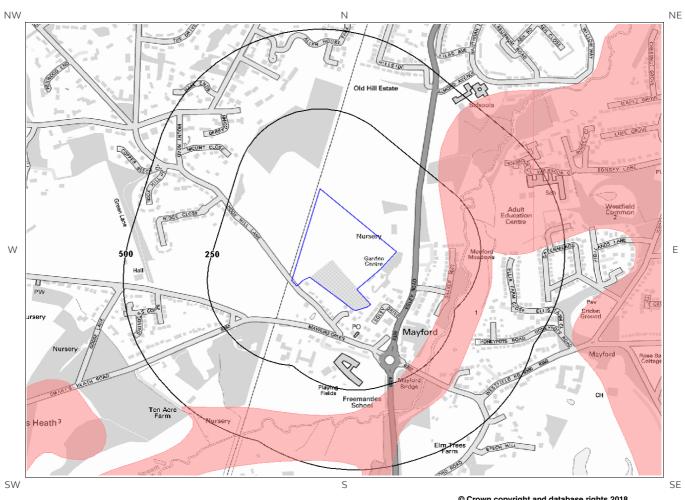
Lex Code	Description	Rock Type
BGS-S	BAGSHOT FORMATION	SAND

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





6 Hydrogeology and Hydrology 6a. Aquifer Within Superficial Geology



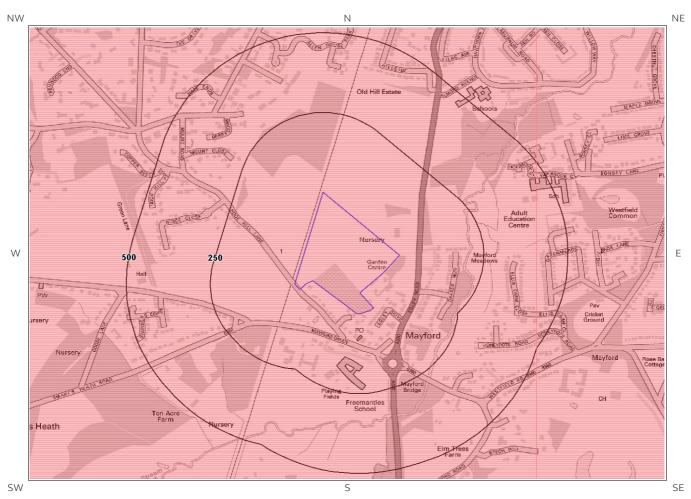
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6b. Aquifer Within Bedrock Geology and Abstraction Licences



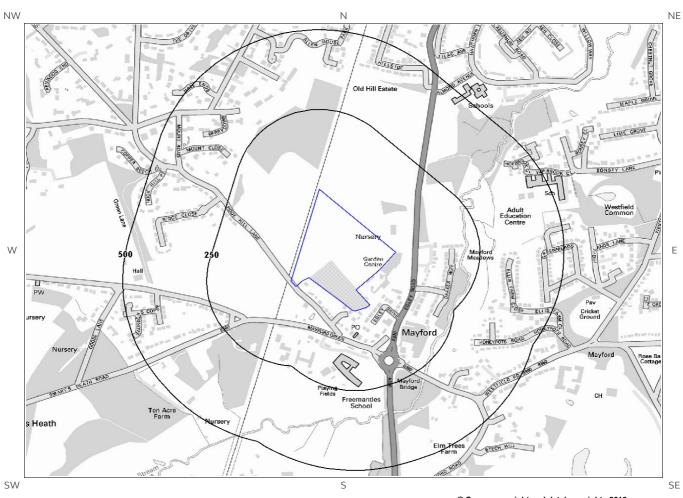
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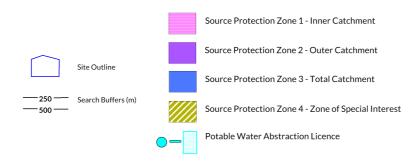




6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



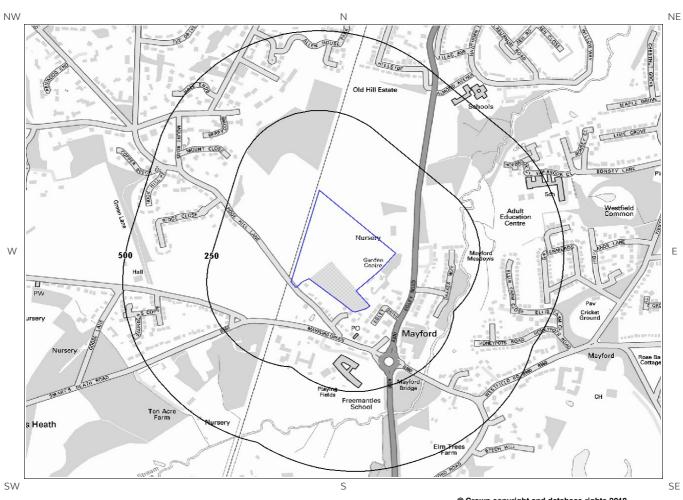
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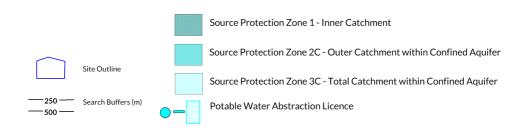




6d. Hydrogeology – Source Protection Zones within confined aquifer



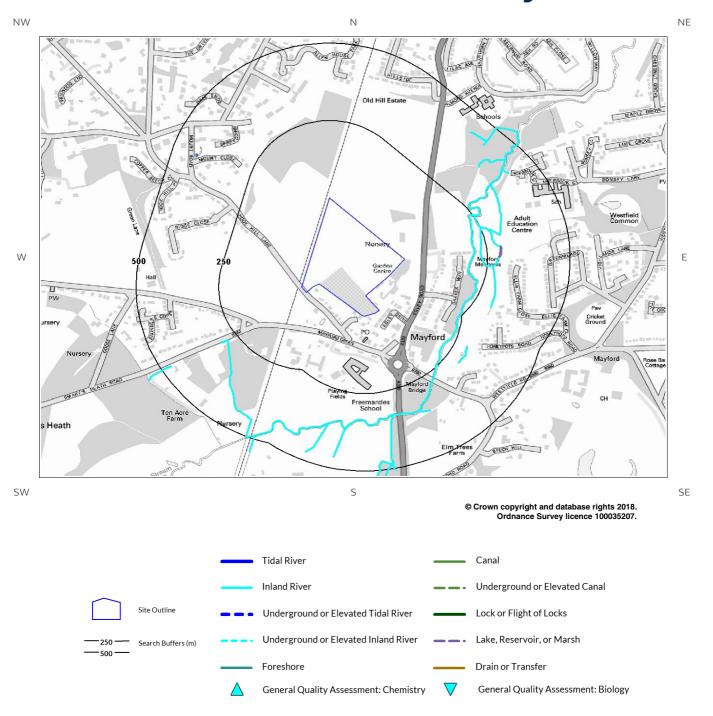
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6e. Hydrology – Watercourse Network and River Quality







6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property

Yes

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

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distanc e (m)	Direction	Designation	Description
1	153	E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	407	E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property

Yes

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

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

ID	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	407	E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers





6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

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

ID	Distance (m)	Direction	NGR	Details		
Not show n	1413	E	500900 155900	Status: Active Licence No: 28/39/30/0287 Details: Spray Irrigation - Storage Direct Source: Thames Groundwater Point: Omega, Moor Lane, Westfield - Borehole Data Type: Point Name: DAVIS	Annual Volume (m³): 3200 Max Daily Volume (m³): 328 Original Application No: WRA/4342/1 Original Start Date: 5/8/1975 Expiry Date: - Issue No: 100 Version Start Date: 8/1/1988 Version End Date:	
Not show n	1413	E	500900 155900	Status: Active Licence No: 28/39/30/0287 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Omega, Moor Lane, Westfield - Borehole Data Type: Point Name: DAVIS	Annual Volume (m³): 3200 Max Daily Volume (m³): 328 Original Application No: WRA/4342/1 Original Start Date: 5/8/1975 Expiry Date: - Issue No: 100 Version Start Date: 8/1/1988 Version End Date:	
Not show n	1500	NW	498100 157440	Status: Historical Licence No: 28/39/30/0292 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Woking Golf Club - Borehole Data Type: Point Name: WOKING GOLF CLUB ESTATES LTD	Annual Volume (m³): 20547 Max Daily Volume (m³): 181.84 Original Application No: NPSWR00394 Original Start Date: 24/3/1976 Expiry Date: - Issue No: 101 Version Start Date: 1/4/2009 Version End Date:	
Not show n	1500	NW	498100 157440	Status: Historical Licence No: 28/39/30/0292 Details: Spray Irrigation - Storage Direct Source: Thames Groundwater Point: Woking Golf Club - Borehole Data Type: Point Name: WOKING GOLF CLUB ESTATES LTD	Annual Volume (m³): 20547 Max Daily Volume (m³): 181.84 Original Application No: NPSWR00394 Original Start Date: 24/3/1976 Expiry Date: - Issue No: 101 Version Start Date: 1/4/2009 Version End Date:	
Not show n	1501	NW	498097 157436	Status: Active Licence No: 28/39/30/0292 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Woking Golf Club - Borehole Data Type: Point Name: WOKING GOLF CLUB ESTATES LTD	Annual Volume (m³): 20547 Max Daily Volume (m³): 91 Original Application No: NPS/WR/017440 Original Start Date: 24/3/1976 Expiry Date: - Issue No: 102 Version Start Date: 20/3/2015 Version End Date:	
Not show n	1501	NW	498097 157436	Status: Active Licence No: 28/39/30/0292 Details: Spray Irrigation - Storage Direct Source: Thames Groundwater Point: Woking Golf Club - Borehole Data Type: Point Name: WOKING GOLF CLUB ESTATES LTD Annual Volume (m³): 2054 Max Daily Volume (m³): 9 Original Application No: NPS/WR Original Start Date: 24/3/19 Expiry Date: - Issue No: 102 Version Start Date: 20/3/20		





6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

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

ID	Distance (m)	Direction	NGR	Details		
Not shown	1751	NW	498670 158240	Status: Historical Licence No: 28/39/30/0427 Details: Transfer between sources Direct Source: Thames Surface Water - Non Tidal Point: Inland Water (basingstoke Canal) At Langmans Bridge, Lock 7 Data Type: Point Name: SURREY COUNTY COUNCIL	Annual Volume (m³): - Max Daily Volume (m³): - Application No: WRA/S/1188 Original Start Date: 27/4/2005 Expiry Date: 31/3/2015 Issue No: 1 Version Start Date: 27/4/2005 Version End Date:	
Not shown	1751	NW	498670 158240	Status: Historical Annual Volume (m³): 634000 Licence No: 28/39/30/0427 Max Daily Volume (m³): 1728 Details: River Recirculation Application No: - Direct Source: Thames Surface Water - Non Tidal Point: Inland Water (basingstoke Canal) At Expiry Date: 31/3/2015 Langmans Bridge, Lock 7 Issue No: 2 Data Type: Point Version Start Date: 25/10/200 Name: SURREY COUNTY COUNCIL Version End Date:		
Not shown	1751	NW	498670 158240	Status: Active Licence No: 28/39/30/0427/R01 Details: River Recirculation Direct Source: Thames Surface Water - Non Tidal Point: Inland Water (basingstoke Canal) At Langmans Bridge, Lock 7 Data Type: Point Name: SURREY COUNTY COUNCIL	Annual Volume (m³): 634000 Max Daily Volume (m³): 1728 Application No: NPS/WR/017212 Original Start Date: 1/4/2015 Expiry Date: 31/3/2027 Issue No: 1 Version Start Date: 1/4/2015 Version End Date:	
Not shown	1870	E	501458 156305	Status: Active Licence No: TH/039/0030/024 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Thames Surface Water - Non Tidal Point: River Wey At Gresham Mill, Old Woking, Surrey Data Type: Point Name: Linden Limited	Annual Volume (m³): 0 Max Daily Volume (m³): 0 Application No: NPS/WR/010471 Original Start Date: 5/8/2011 Expiry Date: 31/3/2027 Issue No: 2 Version Start Date: 18/10/2012 Version End Date:	
Not shown	1870	E	501458 156305	Status: Historical Licence No: TH/039/0030/024 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Thames Surface Water - Non Tidal Point: River Wey At Gresham Mill Data Type: Point Name: Linden Homes South East Limited	Annual Volume (m³): 0 Max Daily Volume (m³): 0 Application No: NPS/WR/006738 Original Start Date: 5/8/2011 Expiry Date: 31/3/2027 Issue No: 1 Version Start Date: 5/8/2011 Version End Date:	
Not shown	1978	W	497510 157320	Status: Historical Annual Volume (m³): - Licence No: 28/39/30/0404 Max Daily Volume (m³): - Details: Spray Irrigation - Storage Application No: WRA/S/101: Direct Source: Thames Surface Water - Non Tidal Original Start Date: 28/6/199		





6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site	None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site

None identified

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

Database searched and no data found.





6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site

Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
0	On Site	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.
330	SE	Minor Aquifer/Intermediate Leaching Potential	l1	Soils which can possibly transmit a wide range of pollutants.
407	E	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
410	E	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.

6.9 River Quality

Environment Agency/Natural Resources	Wales information on river	r quality within '	1500m of the study
site			None identified

6.9.1 Biological Quality: Database searched and no data found.

6.9.2 Chemical Quality:

Database searched and no data found.





6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	194 E	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.6
12	194 E	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.6
2	231 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
13	231 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
3	247 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Underground Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
4	247 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
5	247 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
14	247 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Underground Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
15	247 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
16	247 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
6	252 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided





ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
17	252 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
7	254 NE	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0
18	254 NE	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0
8	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
9	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
10	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
11	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
19	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
20	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
21	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
22	269 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
12	280 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
23	280 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
13	281 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Not provided Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
24	281 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: Not provided Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided





ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
14	285 E	- Alternative Name: -	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.1
25	285 E	- Alternative Name: -	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.1
15	289 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
26	289 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
16	314 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
27	314 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
17	329 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.7
Not shown	329 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.7
18	330 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.9
19	330 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.6
Not shown	330 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.9
Not shown	330 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.6
20	340 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	340 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
21	345 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.7





ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
Not shown	345 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.7
22	351 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
33	351 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
23	354 NE	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0
34	354 NE	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0
24	362 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
25	362 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.7
Not shown	362 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	362 S	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.7
26	366 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 0.9
Not shown	366 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 0.9
27	370 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	370 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
28	371 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
39	371 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided





ID	Distance/ Direction	Name	Type of Watercourse	Additional Details	
29	412 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
30	412 NE	Hoe Stream Inland river not influenced Alternative Name: - by normal tidal action. Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0		Relationship to Ground Level: On ground surface Permanence: Unclassified.	
40	412 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
41	412 NE	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0	
31	415 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
42	415 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
32	418 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
43	418 NE	- Inland river not influenced Relationship to Ground Level: On ground surf NE Alternative Name: - by normal tidal action. Permanence: Unclassified.		Relationship to Ground Level: On ground surface	
33	420 W	- Alternative Name: -	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 1.5	
44	420 W	- Alternative Name: -	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 1.5	
34	423 W	- Alternative Name: -	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 3.9	
45	423 W	- Alternative Name: -	Lake, loch or reservoir.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 3.9	
35	426 W	- Inland river not influenced Relationship to Ground Level: On ground surface Waternative Name: - by normal tidal action. Permanence: Unclassified.		Relationship to Ground Level: On ground surface	
46	426 W Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Prov		Relationship to Ground Level: On ground surface		
36	434 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	





ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
47	434 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
37	439 NE	Alternative Name: - by normal tidal action. Permanence: Unclassified.		Relationship to Ground Level: On ground surface
48	439 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
38	441 NE	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0
49	441 NE	Hoe Stream Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 5.0
39	443 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	443 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
40	449 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
51	449 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
41	451 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
52	451 NE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
42	468 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
53	468 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
43	472 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 1.9
Not shown	472 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 1.9





ID	Distance/ Direction	Name	Type of Watercourse	Additional Details	
44	481 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
Not shown	481 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
45	5 - Inland river not influenced Relationship to Gro Alternative Name: - by normal tidal action. Permanence: Uncl		Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided		
46	Catchment Area: Thames Inland river not influenced Alternative Name: - S Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Pro		Relationship to Ground Level: On ground surface		
Not shown	486 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided	
Not shown	486 S	Alternative Name: - by normal tidal action. Permanence: Unclassified.		Relationship to Ground Level: On ground surface	
47	492 S	Alternative Name: - by normal tidal action. Permanence: Unclassified.		Relationship to Ground Level: On ground surface	
48	492 - Inland river not influenced Relationship to Ground Le S Alternative Name: - by normal tidal action. Permanence: Unclassified		Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided		
Not shown	492 Hoe Stream Inland river not influenced Alternative Name: - by normal tidal action. Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 4.7		Relationship to Ground Level: On ground surface Permanence: Unclassified.		
Not shown	thown S Alternative Name: - by normal tidal action. Permanence: Unclassified.		Relationship to Ground Level: On ground surface		





6.11 Surface Water Features

Surface water features within 250m of the study site

Identified

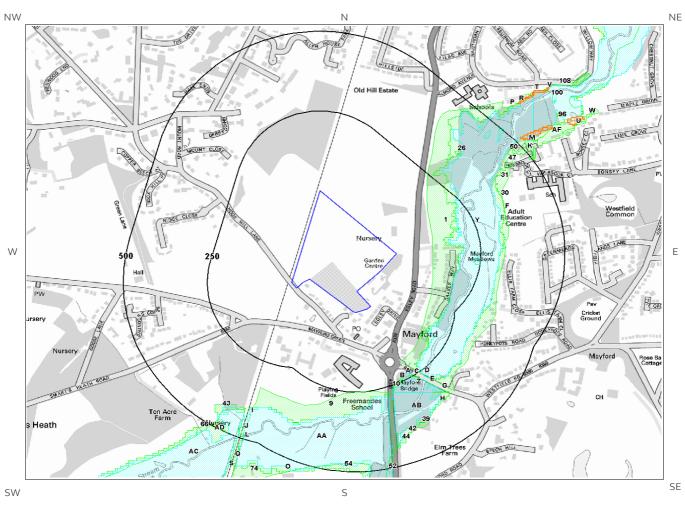
The following surface water records are not represented on mapping:

Distance (m)	Direction
190	E
247	NE
247	NE

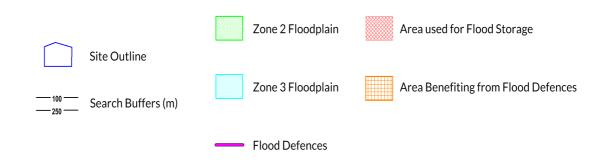




7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



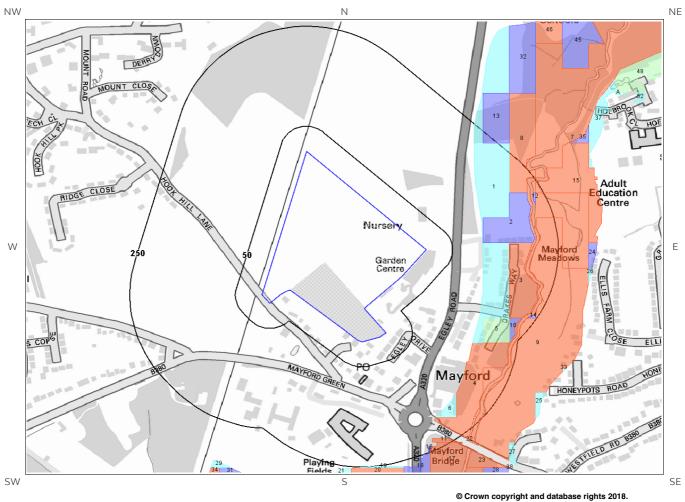
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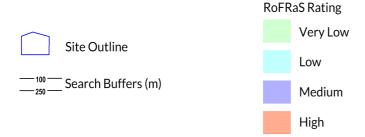




7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m

Identified

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

ID	Distance (m)	Direction	Update	Туре
1	106	Е	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
2Y	144	Е	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
3A	226	SE	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
4B	237	SE	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
5Z	241	SE	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
6A	242	SE	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
7C	245	SE	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
8B	247	SE	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
9	250	S	29-May-2018	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m

Identified

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

ID	Distance (m)	Direction	Update	Type
1	157	Е	30-May-2018	Zone 3 - (Fluvial Models)
2Y	230	SE	30-May-2018	Zone 3 - (Fluvial Models)





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

Highest risk of flooding onsite

Very Low

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

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

7.4 Flood Defences

Flood Defences within 250m of the study site

None identified

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site

None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

7.7 Groundwater Flooding Susceptibility Areas

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

Clearwater Flooding or Superficial Deposits Flooding

Clearwater Flooding

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

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.





7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result

Low

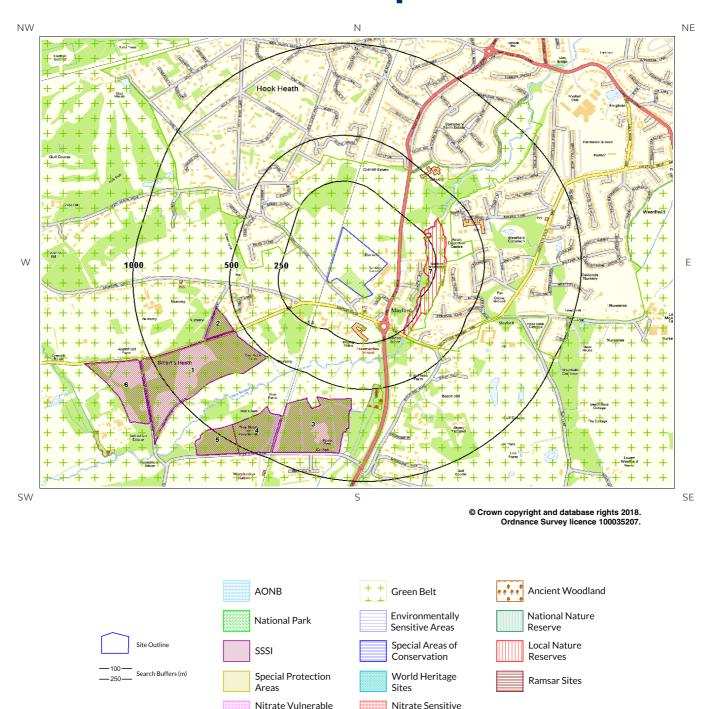
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

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





8. Designated Environmentally Sensitive Sites Map



Areas

Zones





8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site					
	1 Record	s of Sites	of Special Scientific Interest (SSSI) within 2000m of	the study	
				6	
		_	special Scientific Interest (SSSI) records provided by Natural resented as polygons on the Designated Environmentally Sensit	_	
ID	Distance (m)	Direction	SSSI Name	Data Source	
1	510	SW	Smart's and Prey Heaths	Natural England	
2	552	SW	Smart's and Prey Heaths	Natural England	
3	553	S	Smart's and Prey Heaths	Natural England	
4	742	SW	Smart's and Prey Heaths	Natural England	
5	917	SW	Smart's and Prey Heaths	Natural England	
6	1061	SW	Smart's and Prey Heaths	Natural England	
8.	2 Record	s of Natio	Database searched and no data found.	o	
8.	3 Record	ls of Speci	al Areas of Conservation (SAC) within 2000m of the	study site:	
			Database searched and no data found.		
8.	4 Record	s of Speci	al Protection Areas (SPA) within 2000m of the stud	y site:	
			Database searched and no data found.		





8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

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

5

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
9	473	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1259	N	UNKNOWN	Ancient and Semi-Natural Woodland
11	1428	SW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1605	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1939	SW	UNKNOWN	Ancient and Semi-Natural Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

1

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
7	190	Е	Mayford Meadows	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

Database searched and no data found.





8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0 Database searched and no data found. 8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site: 0 Database searched and no data found. 8.11 Records of National Parks (NP) within 2000m of the study site: 0 Database searched and no data found. 8.12 Records of Nitrate Sensitive Areas within 2000m of the study site: 0 Database searched and no data found. 8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site: 1 The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map: Distance Direction ID **NVZ Name Data Source** (m) 1869 Ν Modified **DEFRA** shown 8.14 Records of Green Belt land within 2000m of the study site:

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
14	0	On Site	London Area Greenbelt	Woking District (B)

Report Reference: HMD-377-5286456 Client Reference: P1381J1459-1 4





Not shown	1827	NE	London Area Greenbelt	Woking District (B)
Not shown	1908	Е	London Area Greenbelt	Guildford District (B)
Not shown	1925	SW	London Area Greenbelt	Guildford District (B)





9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site

Negligible

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

Hazard

Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site

Very Low

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

Hazard

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

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site

Negligible

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

Hazard

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

^{*} This indicates an automatically generated 50m buffer and site.





9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Negligible

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

Hazard

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

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Very Low

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

Hazard

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

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

Low

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

Hazard

Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property no significant increase in insurance risk due to running sand problems is likely.

Report Reference: HMD-377-5286456 Client Reference: P1381J1459-1

56

^{*} This indicates an automatically generated 50m buffer and site.





9.2 Radon

9.2.1 Radon Affected Areas

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

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

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

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

No radon protective measures are necessary.





10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site Guidance: No Guidance Required.

None identified





Contact Details

Jomas Associates Ltd

Telephone: +44843 289 2187 rs@jomasassociates.com



British Geological Survey Enquiries

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

Web:www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:

enquiries@bgs.ac.uk

Environment Agency

National Customer Contact Centre, PO Box 544 Rotherham, S60 1BY Tel: 03708 506 506

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

Public Health England

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

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

The Coal Authority

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

www.coal.gov.uk

Ordnance Survey

Adanac Drive, Southampton SO16 0AS Tel: 08456 050505

Data

Local Authority

Authority: Woking Borough Council
Phone: 01483 755 855
Web: http://www.woking.gov.uk/
Address: Civic Offices, Gloucester Square, Woking, Surrey, GU21 6YL

Gemapping PLC

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















LOCATION INTELLIGENCE

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

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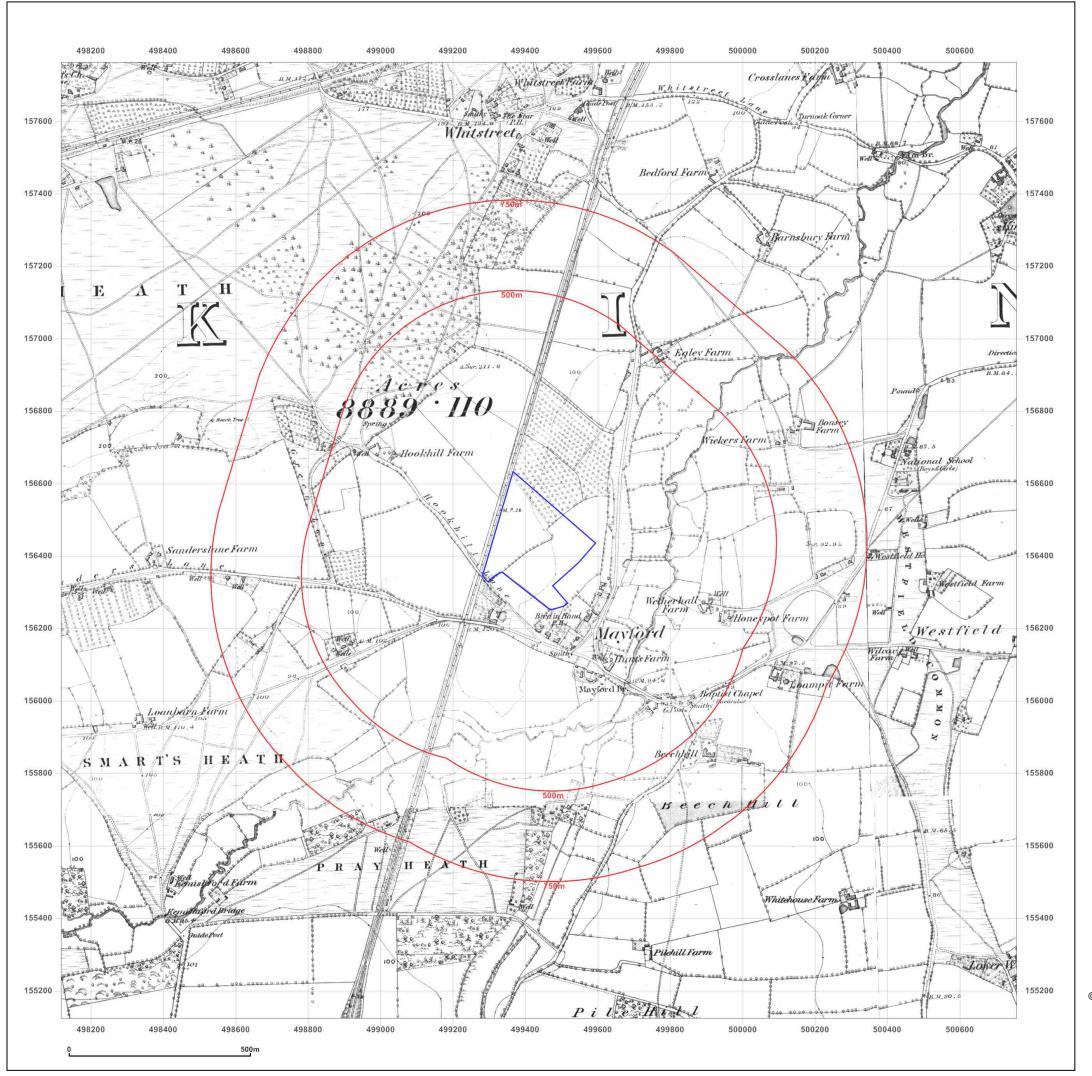
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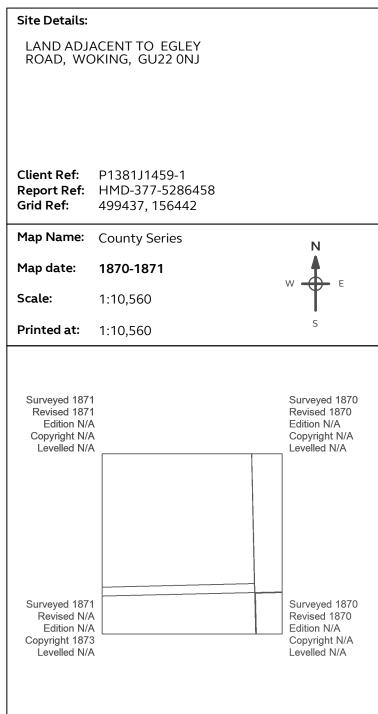
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APPENDIX 3 – OS HISTORICAL MAPS







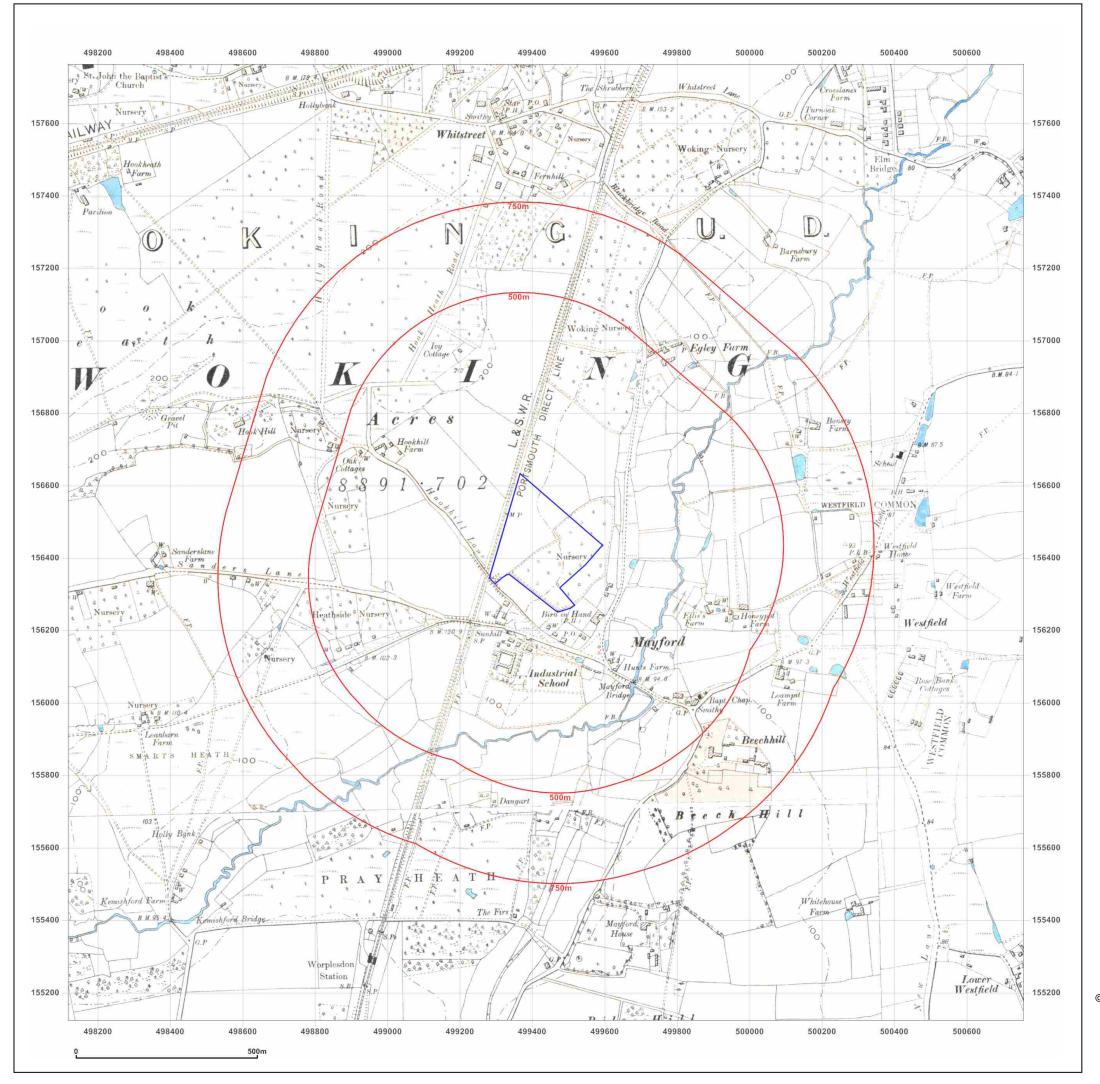




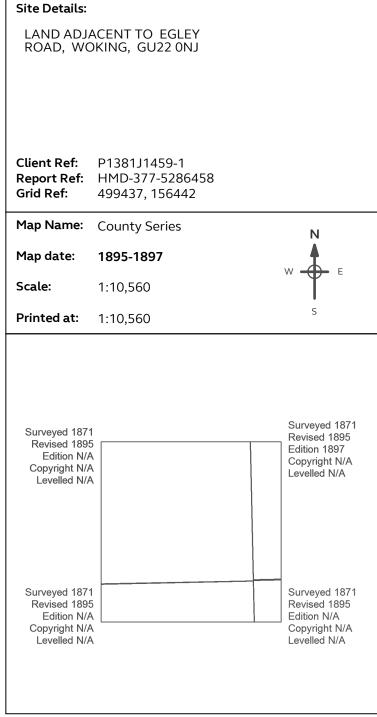
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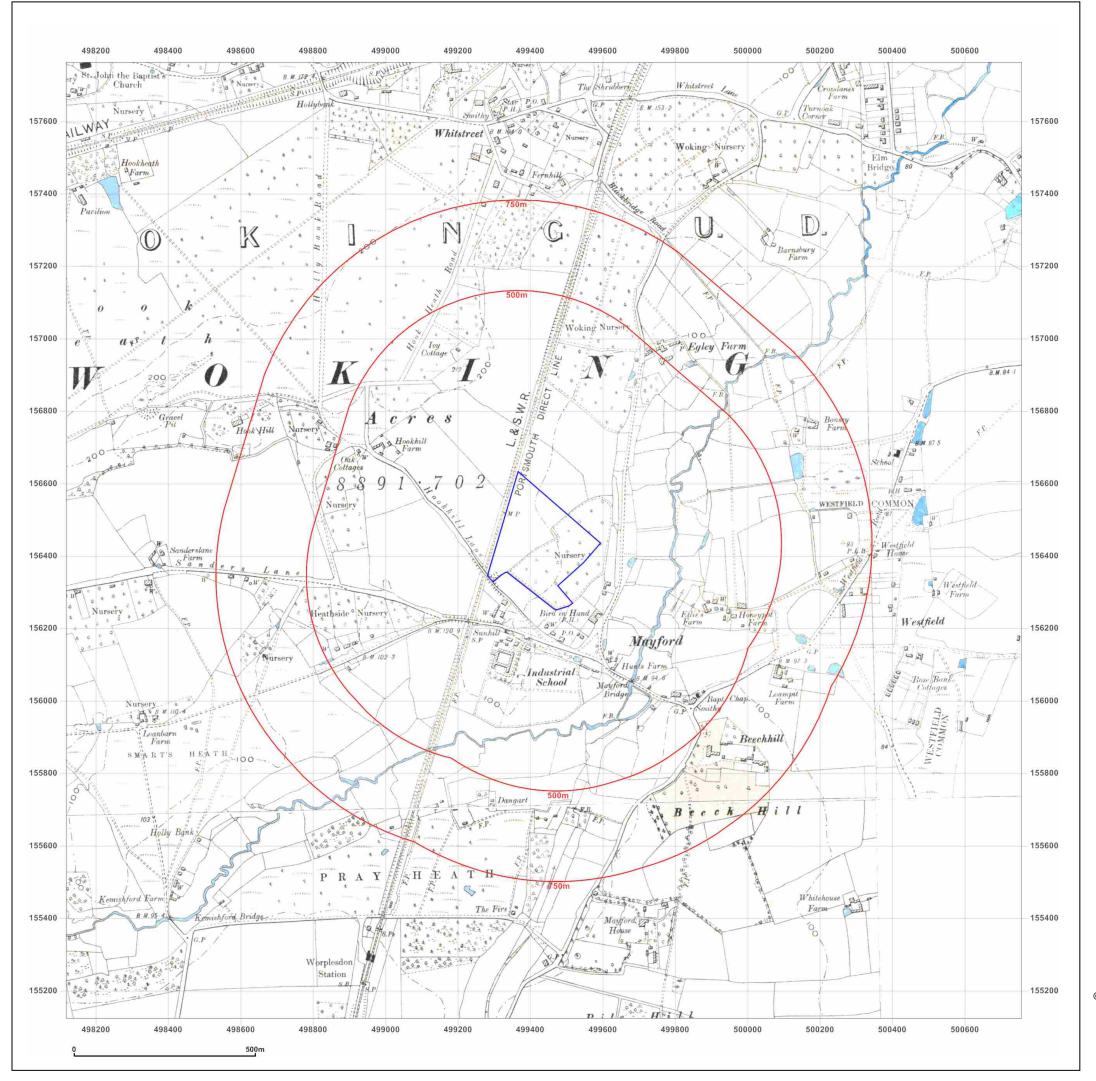




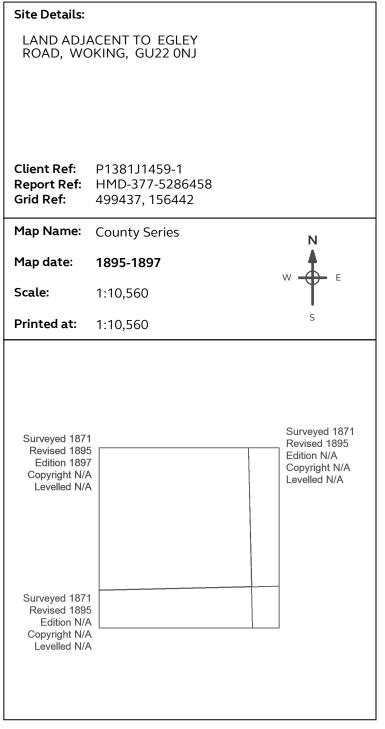
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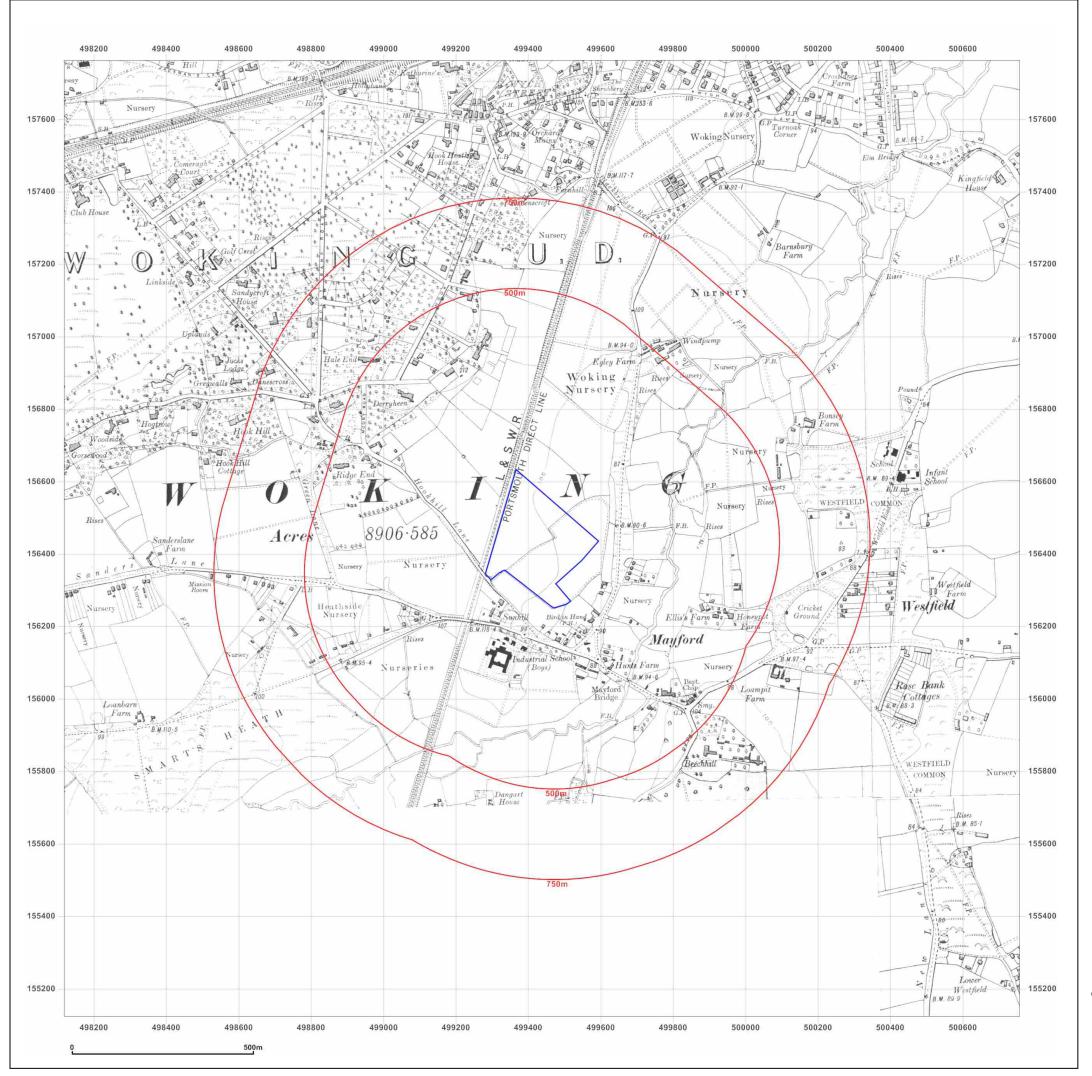




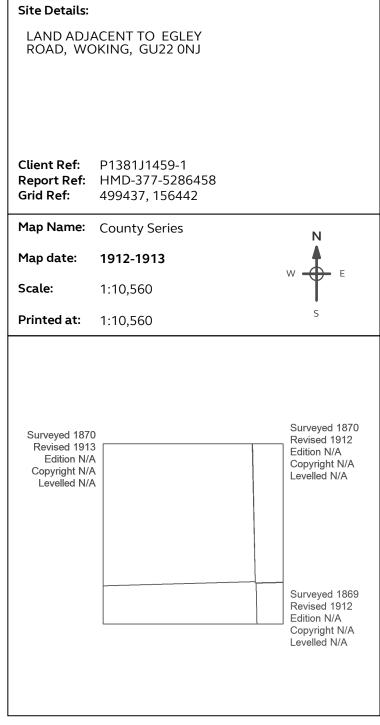
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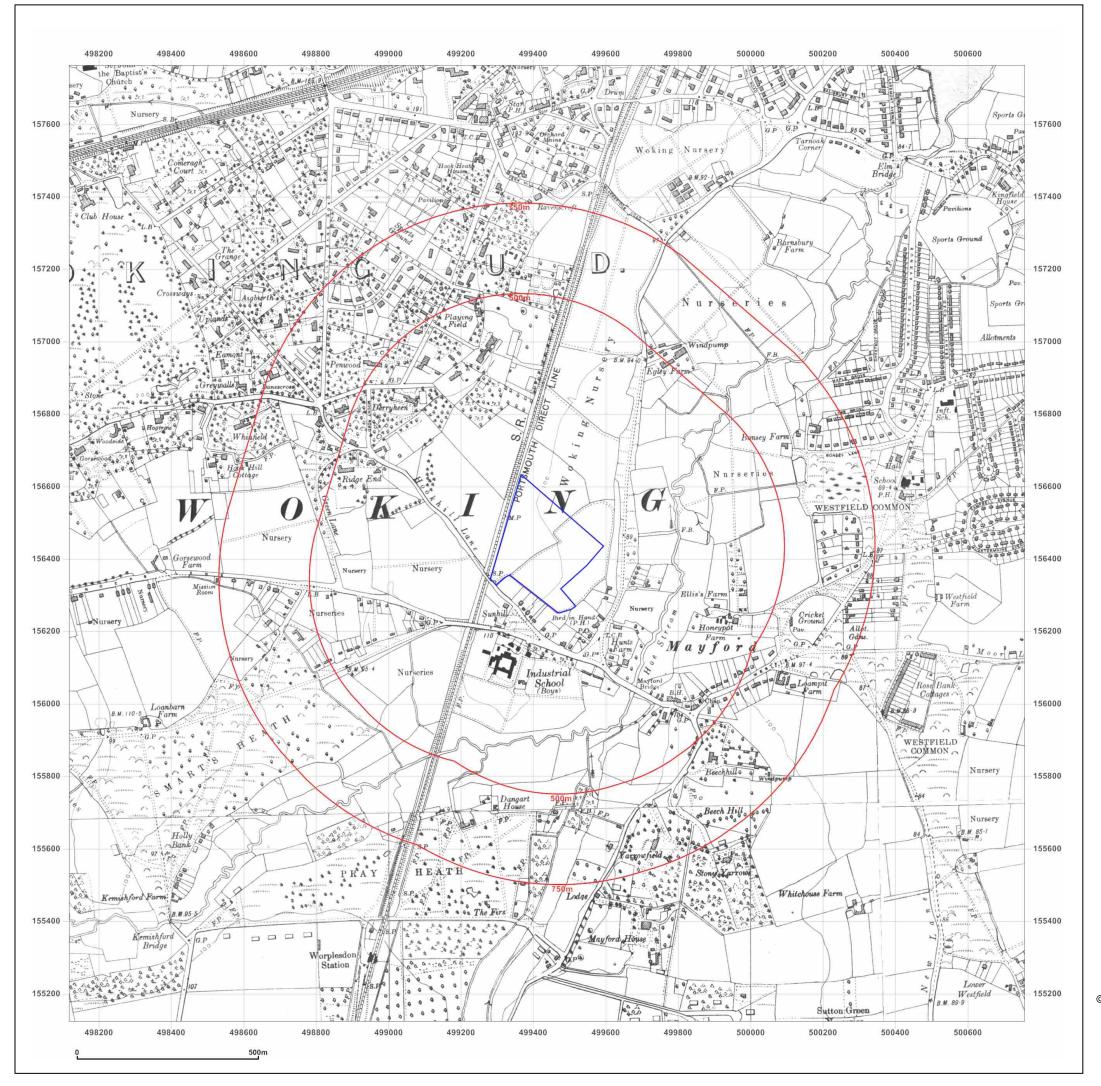
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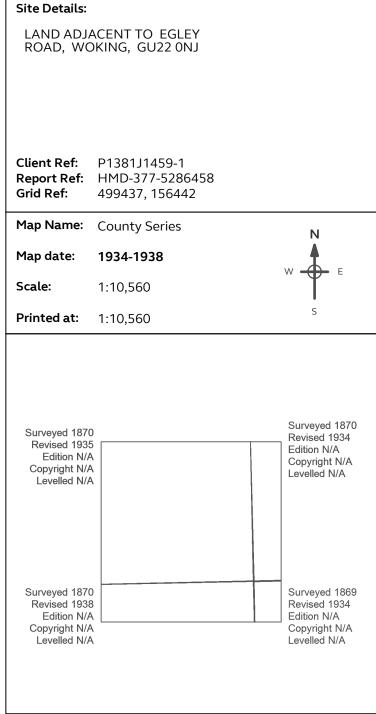
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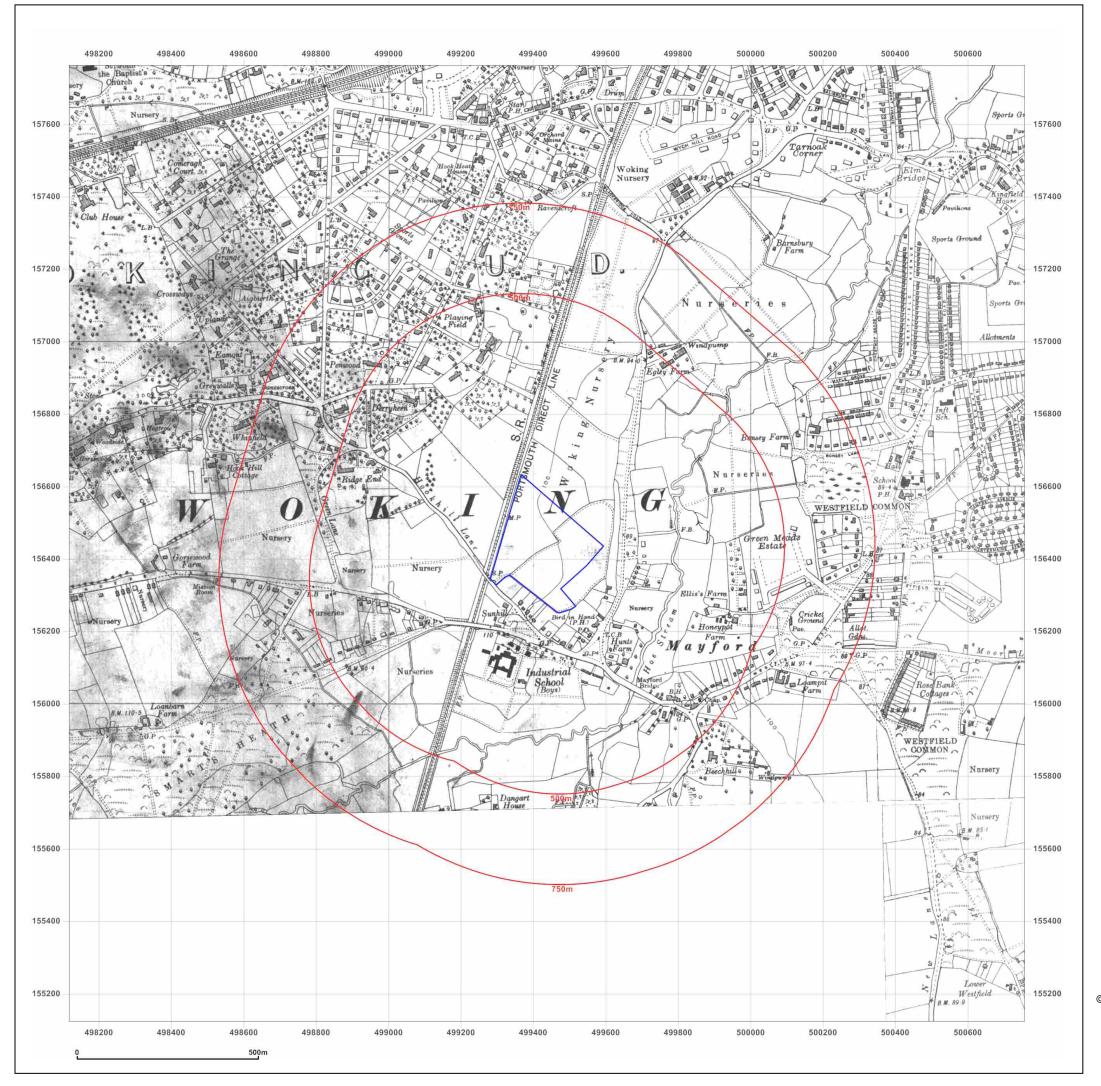




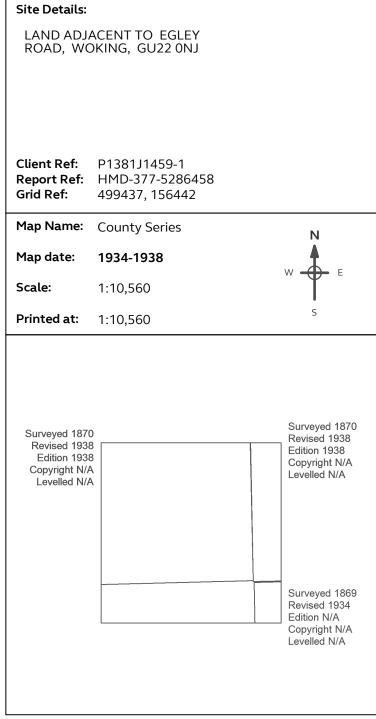
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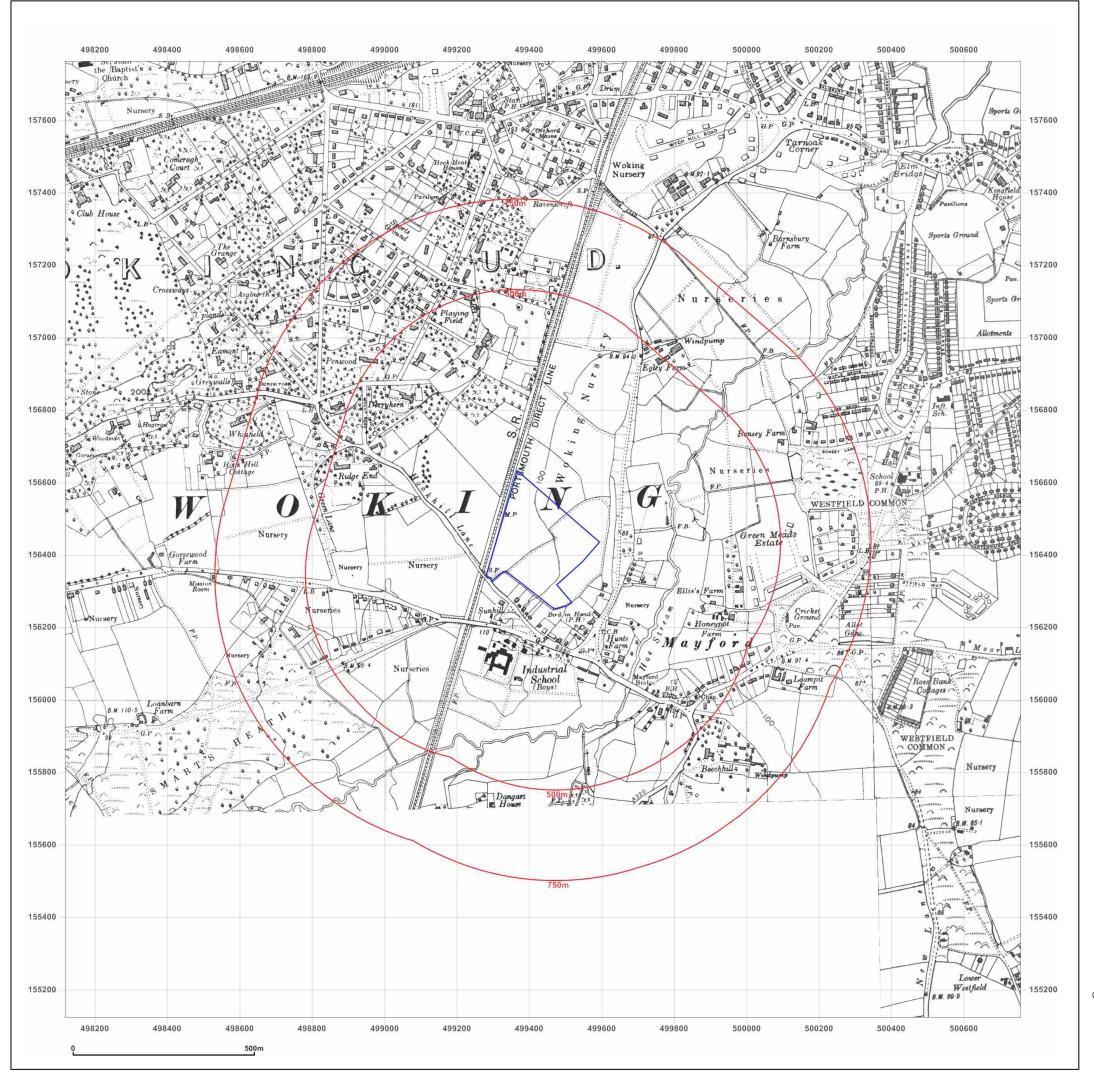




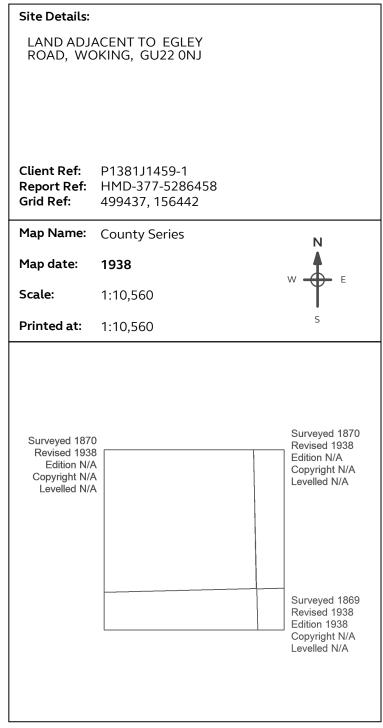
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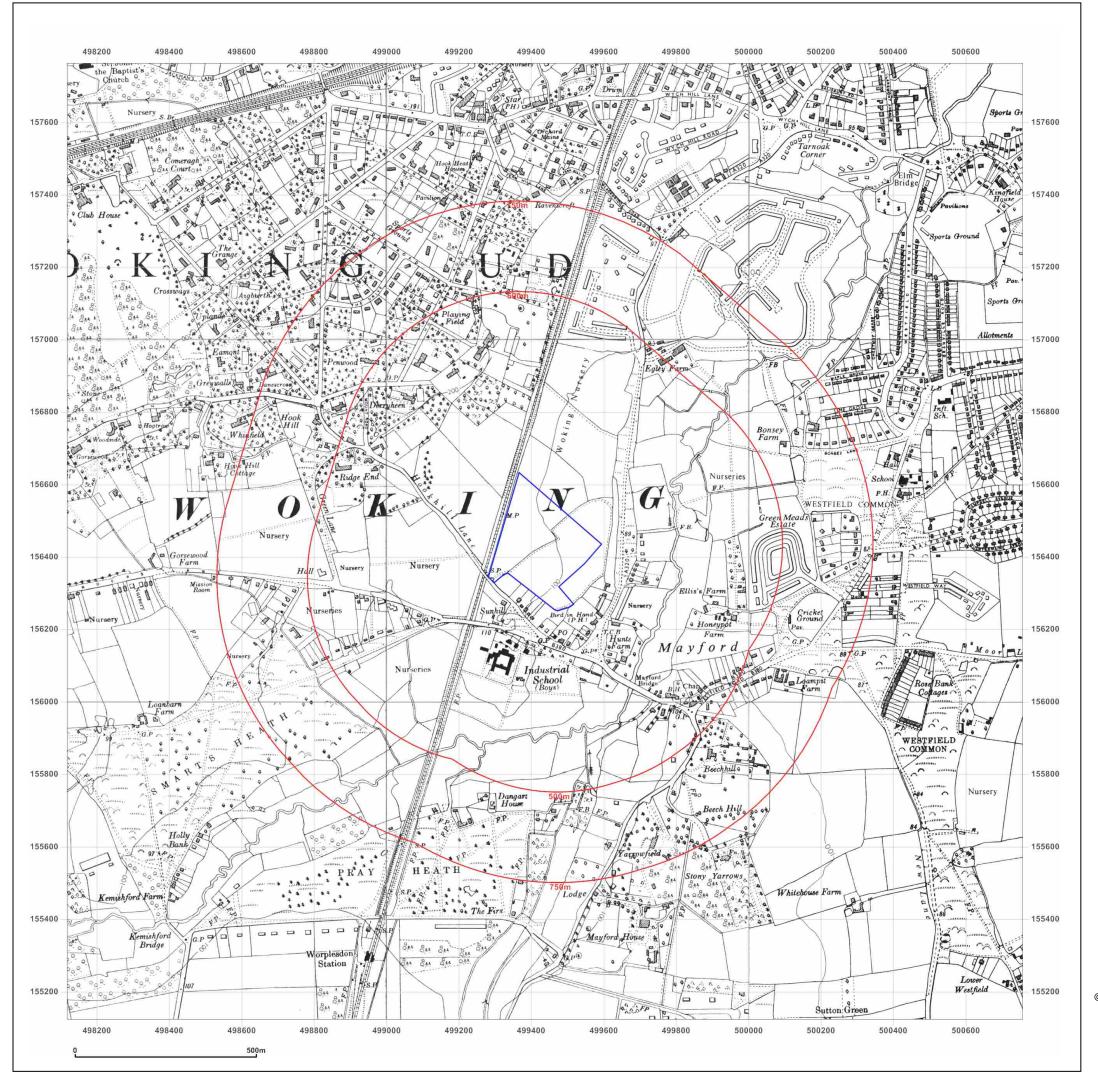




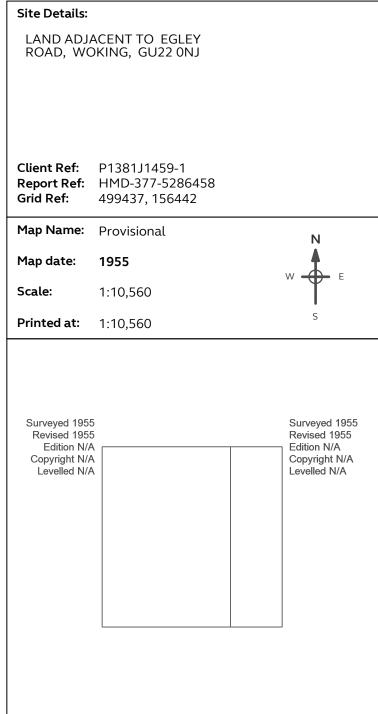
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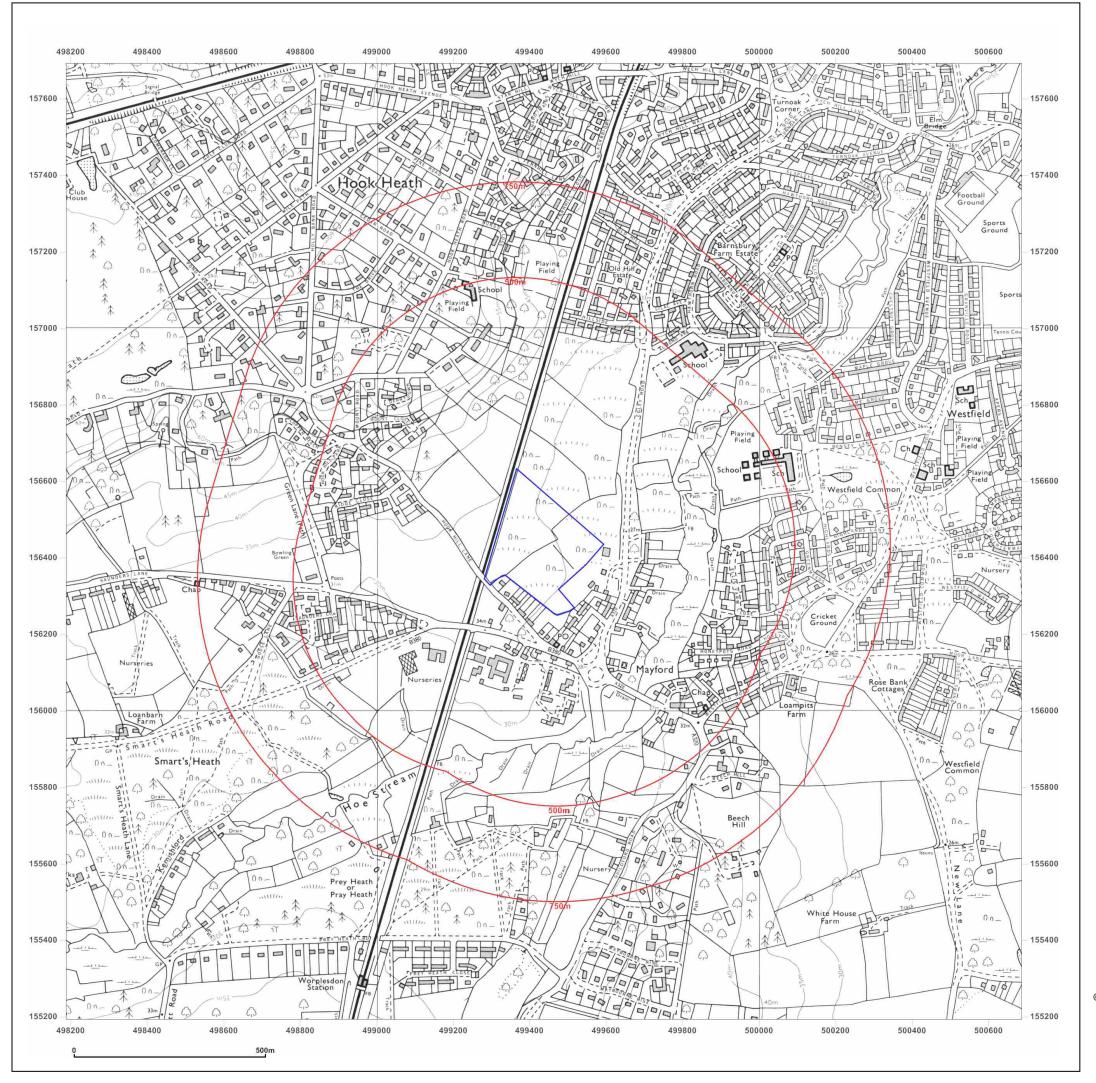




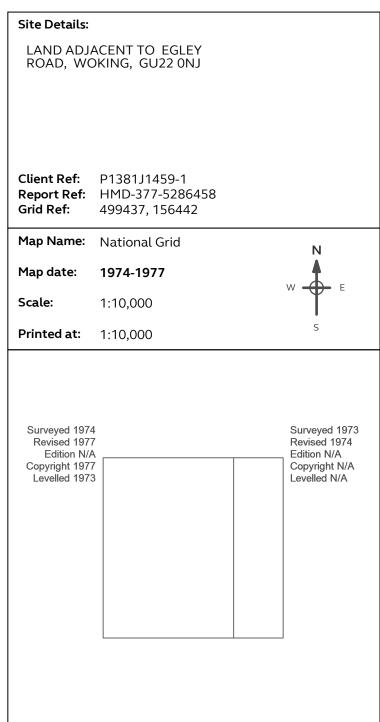
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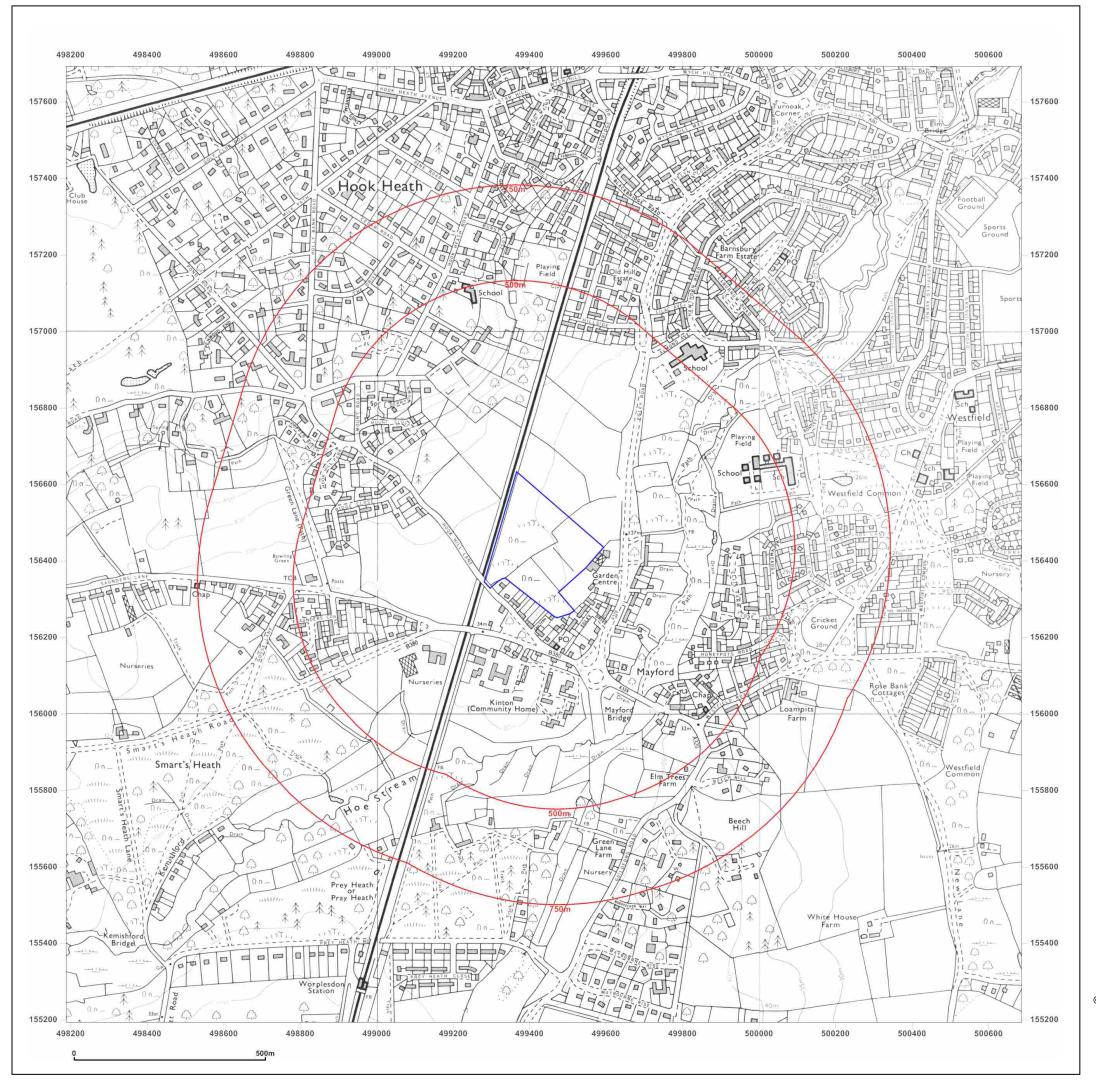




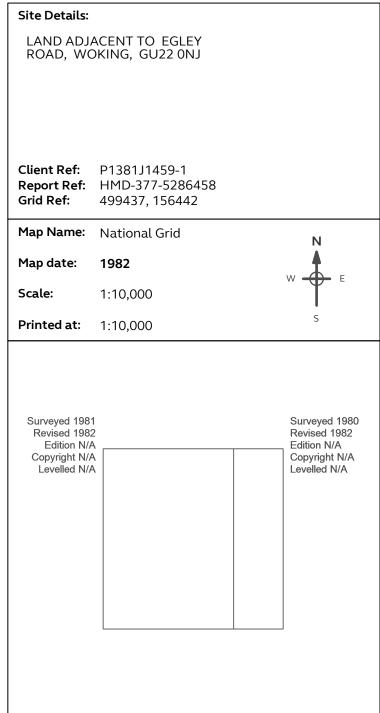
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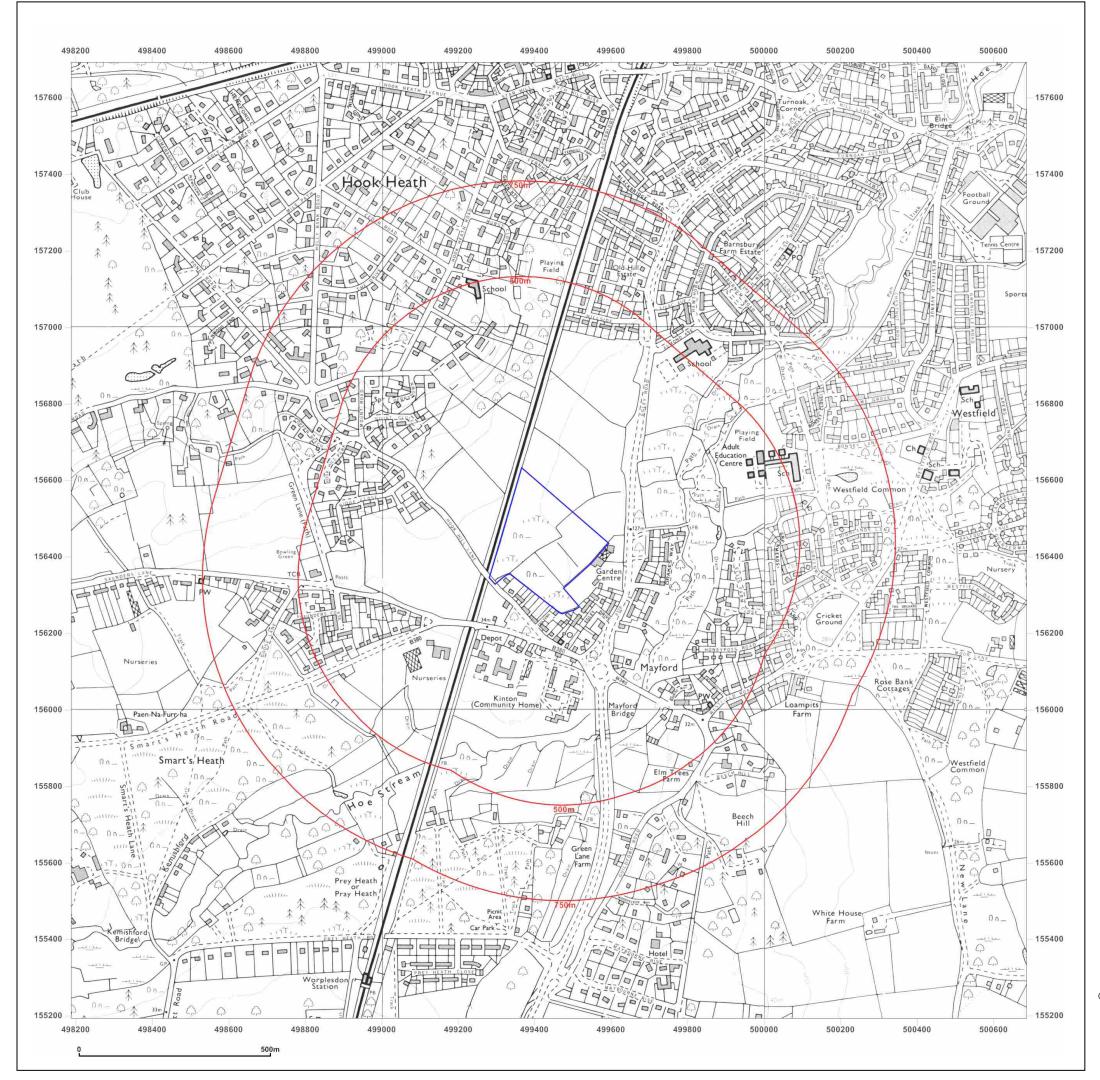




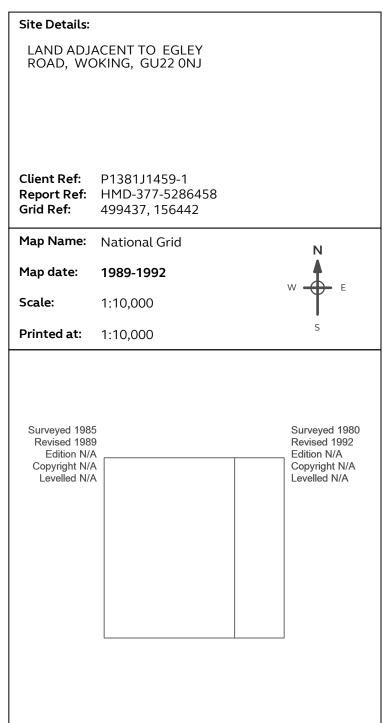
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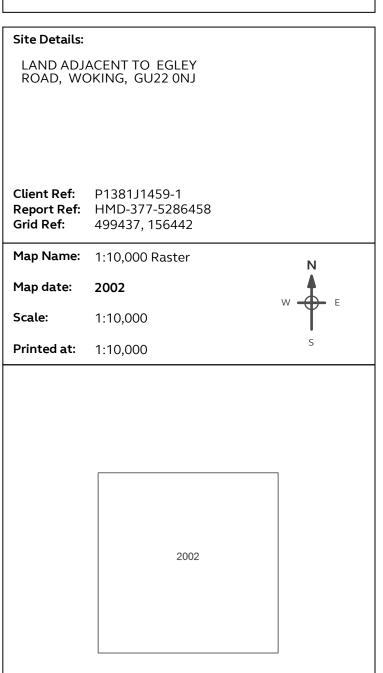
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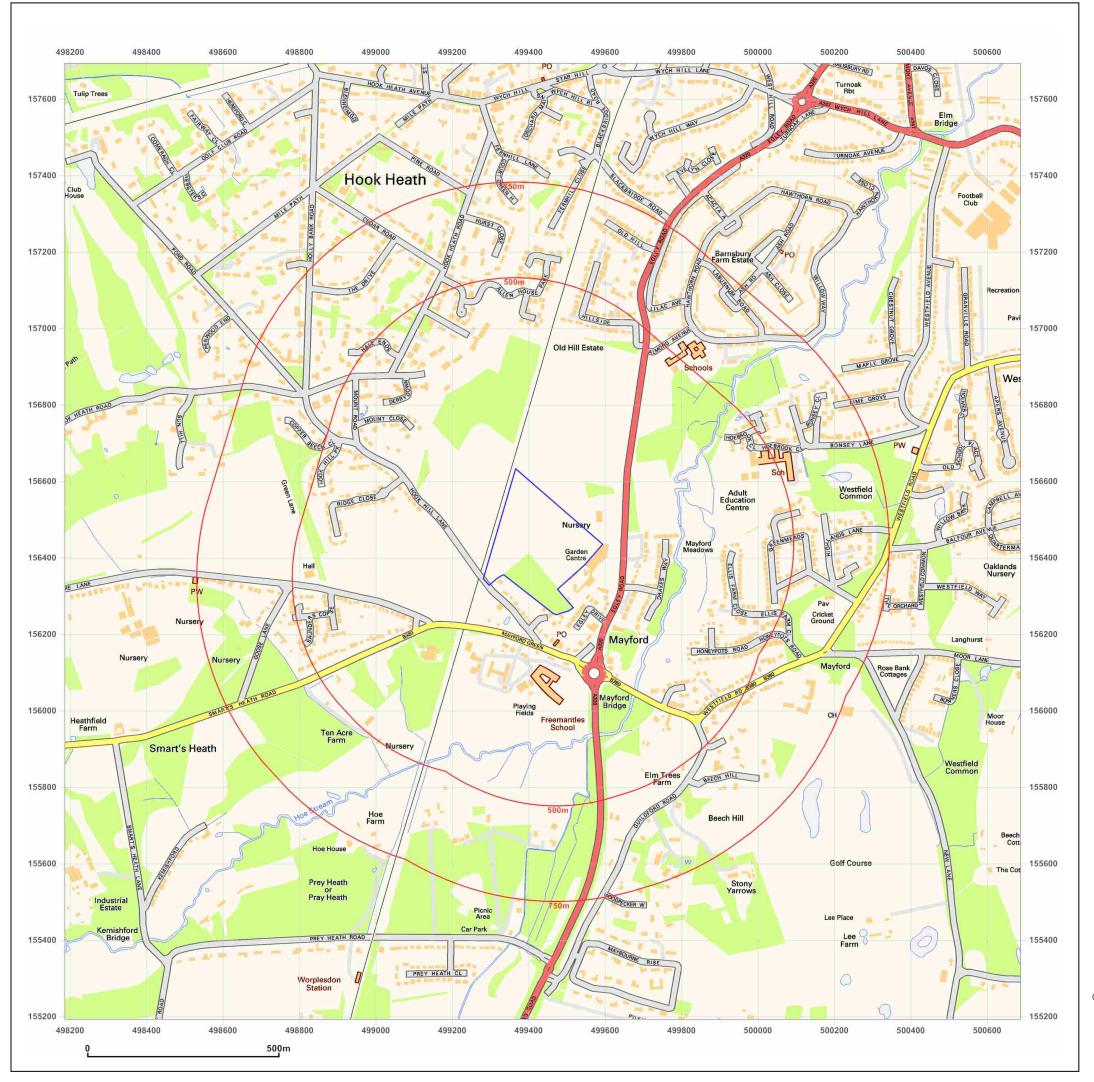




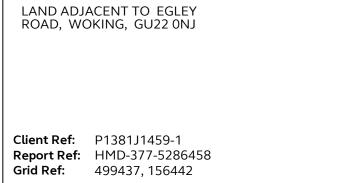
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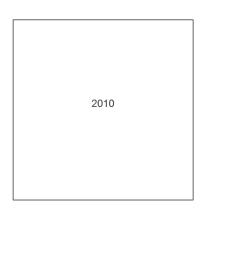
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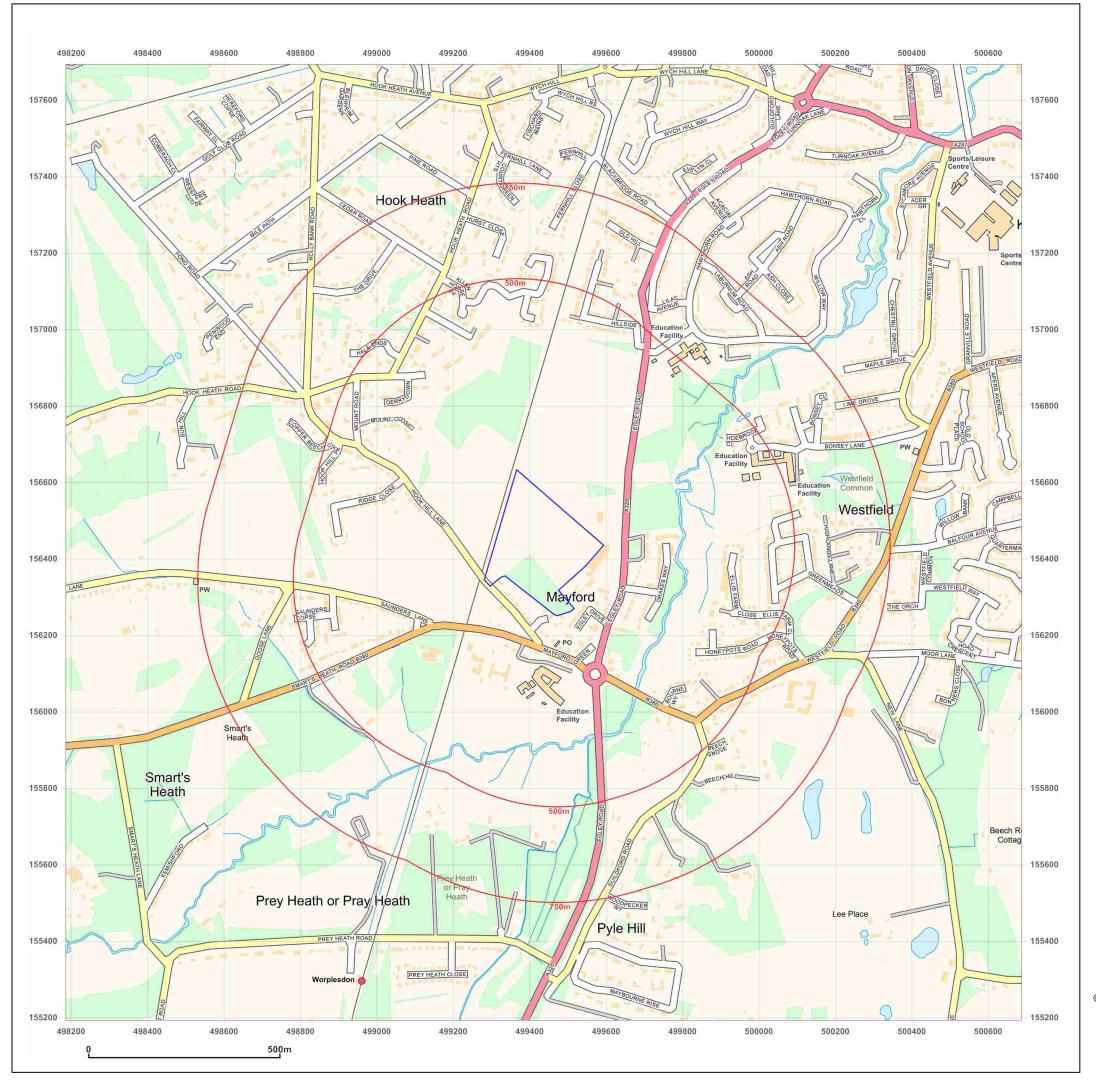


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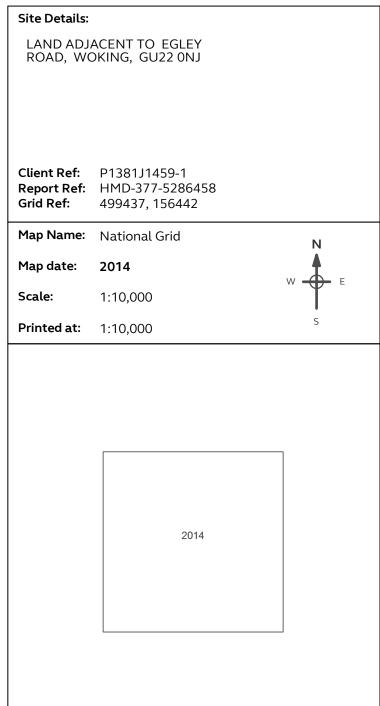
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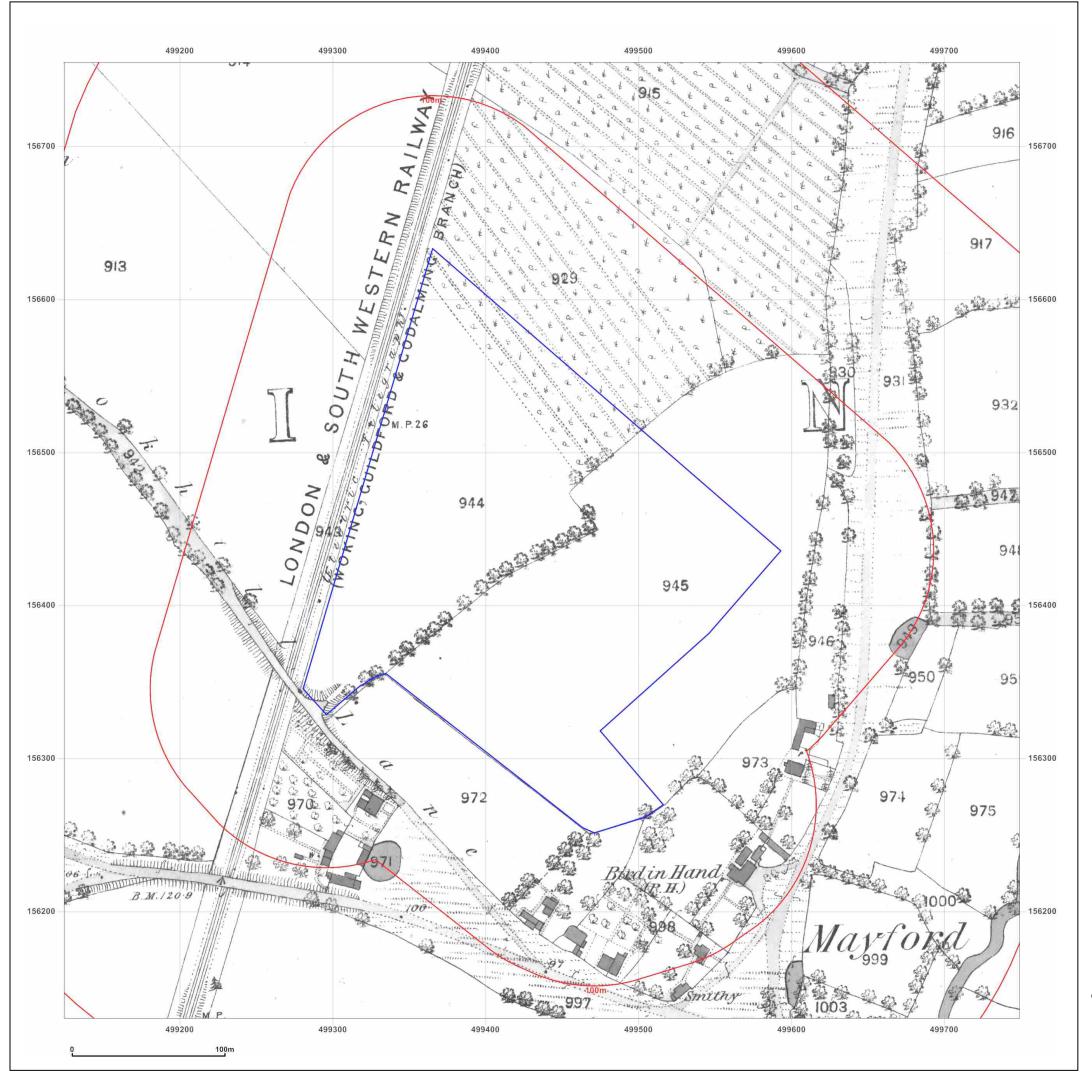




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LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 ONJ

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Map Name: County Series

Map date: 1871

Scale: 1:2,500

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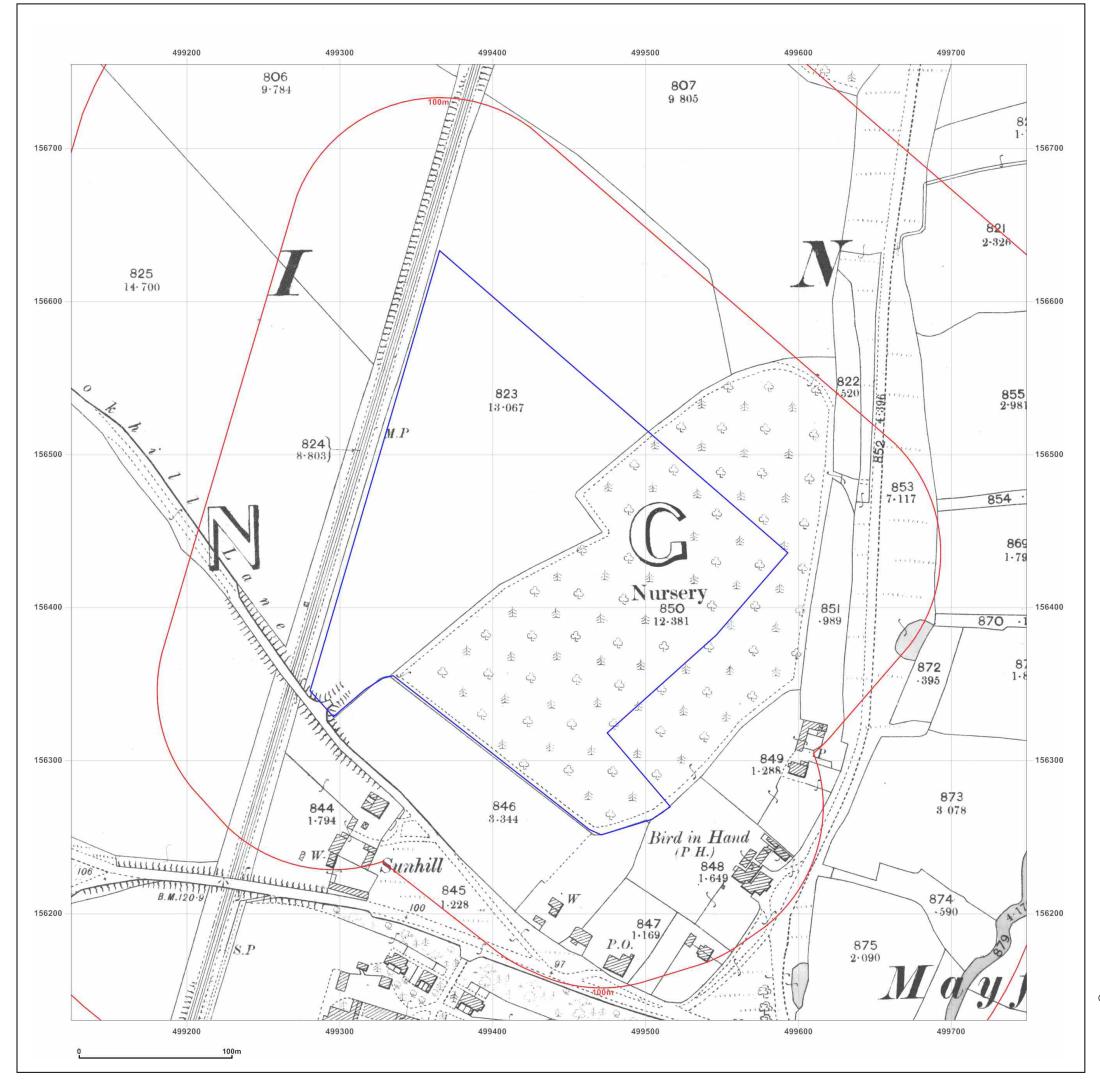


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LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 ONJ

Client Ref: P1381J1459-1 Report Ref: HMD-377-5286458 Grid Ref: 499437, 156442

Map Name: County Series

Map date: 1896

Scale: 1:2,500

Printed at: 1:2,500

Surveyed 1896 Revised 1896 Edition N/A Copyright N/A Levelled N/A



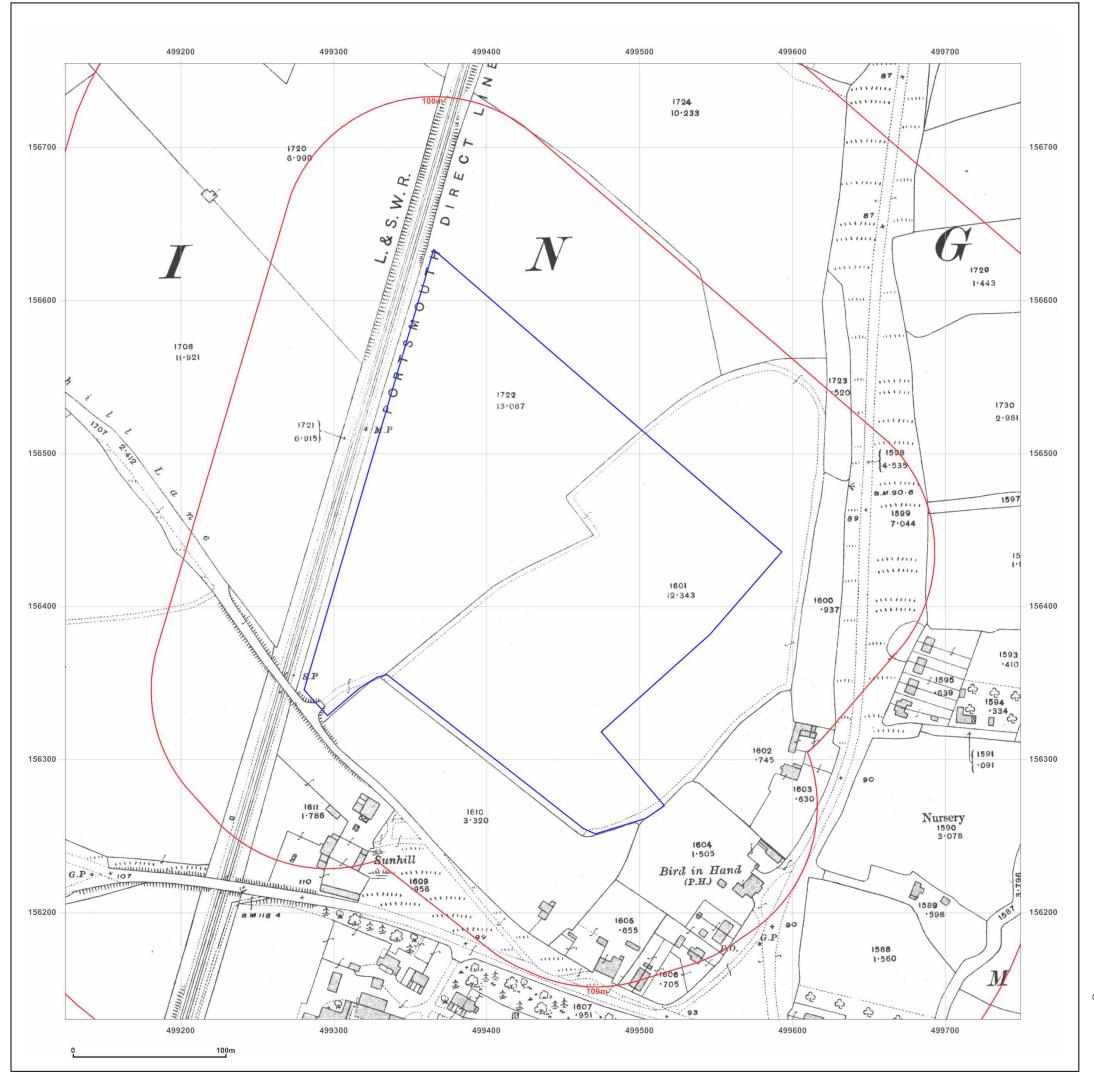


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LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 ONJ

Client Ref: P1381J1459-1 Report Ref: HMD-377-5286458 Grid Ref: 499437, 156442

Map Name: County Series

Map date: 1916

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Printed at: 1:2,500

Surveyed 1916 Revised 1916 Edition N/A Copyright N/A Levelled N/A



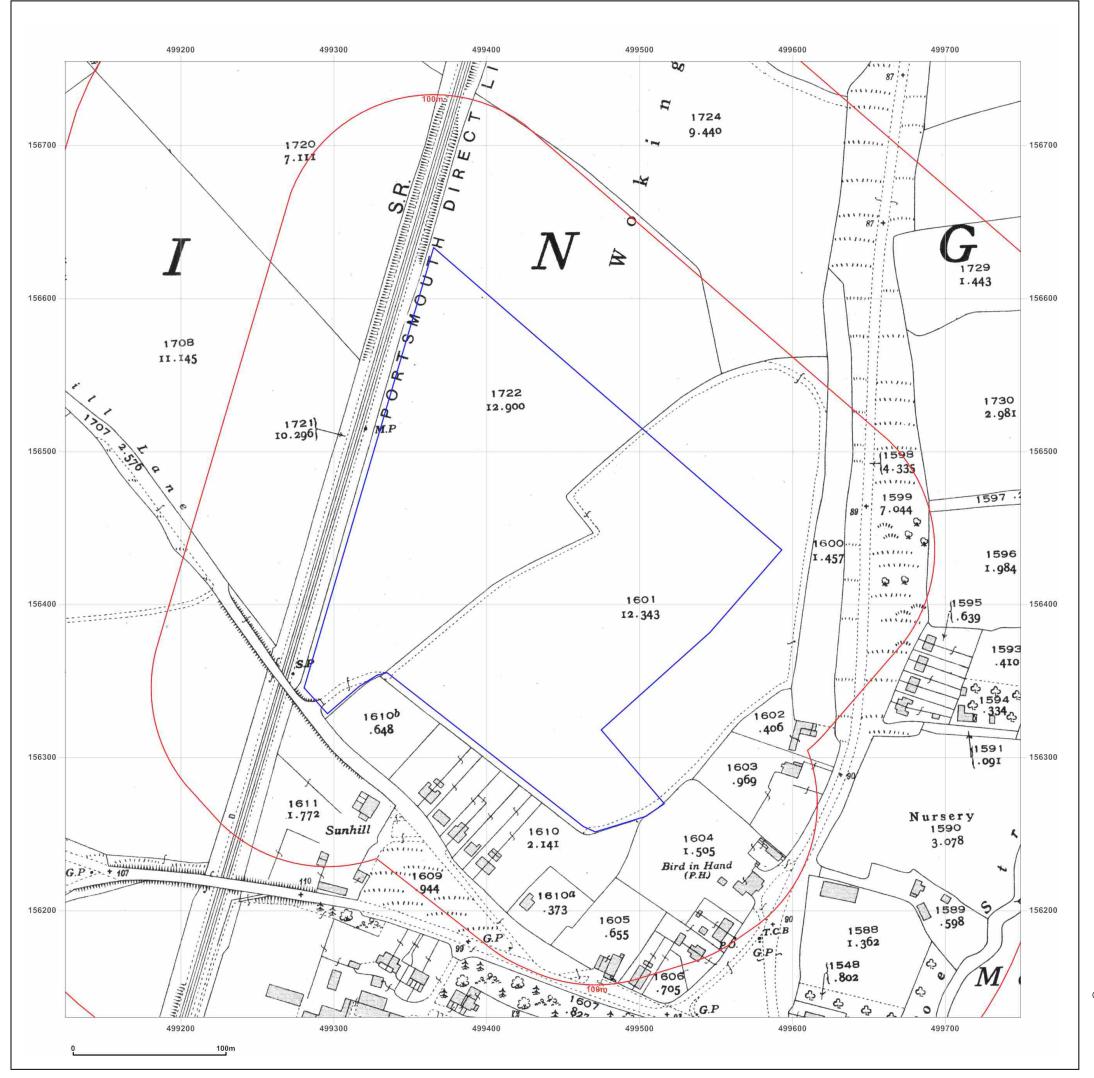


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Client Ref: P1381J1459-1 Report Ref: HMD-377-5286458 Grid Ref: 499437, 156442

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Surveyed 1934 Revised 1934 Edition N/A Copyright N/A Levelled N/A



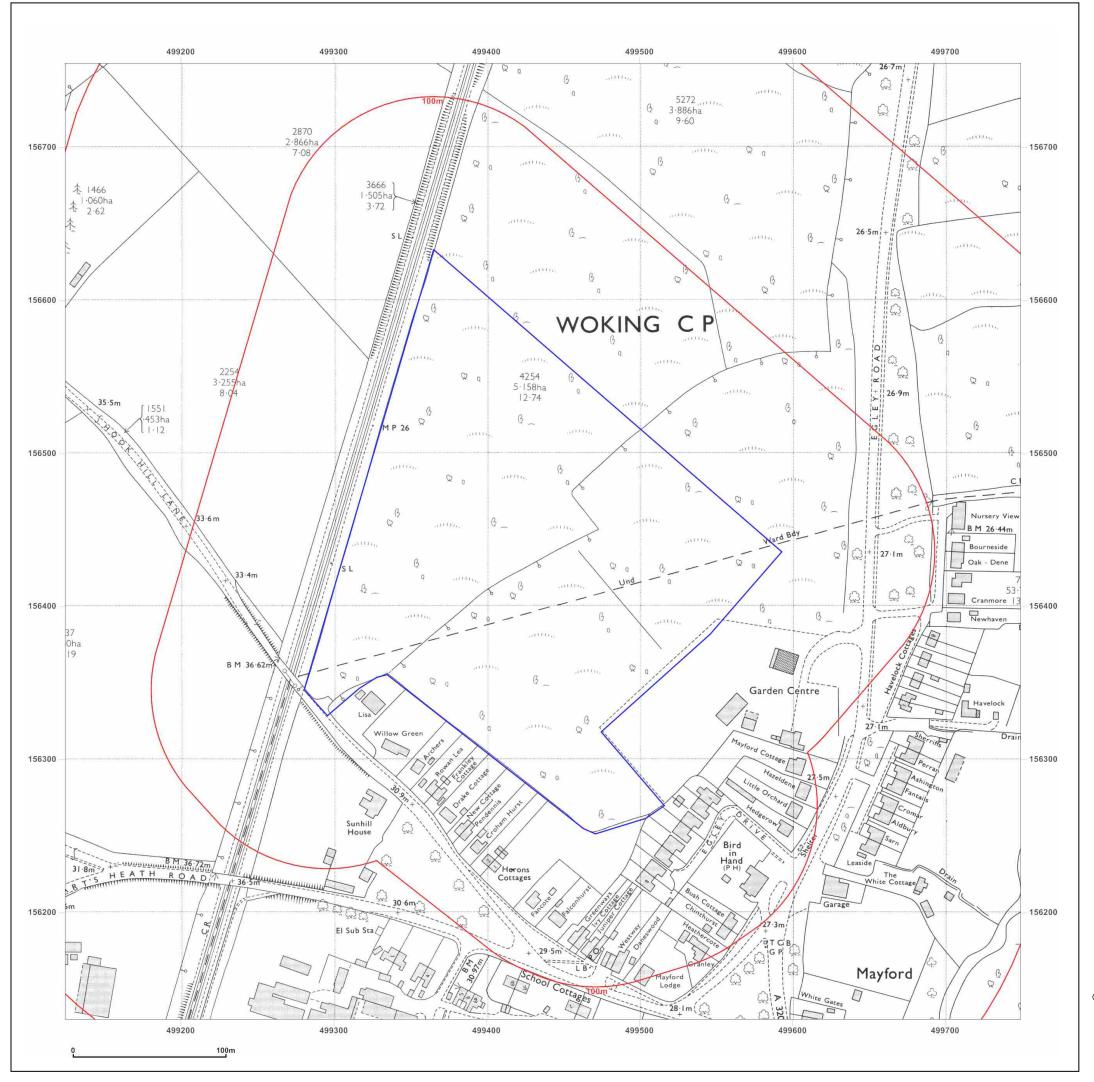


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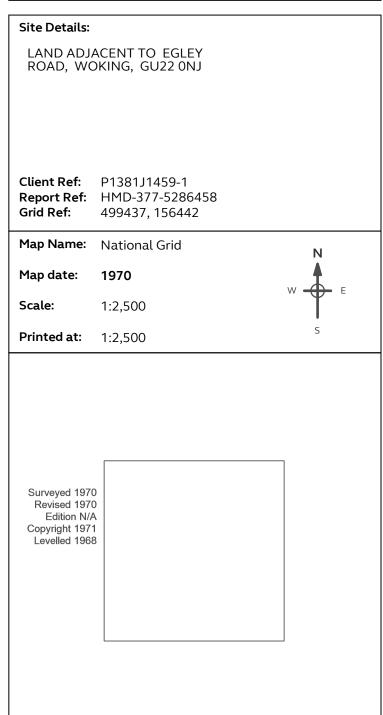
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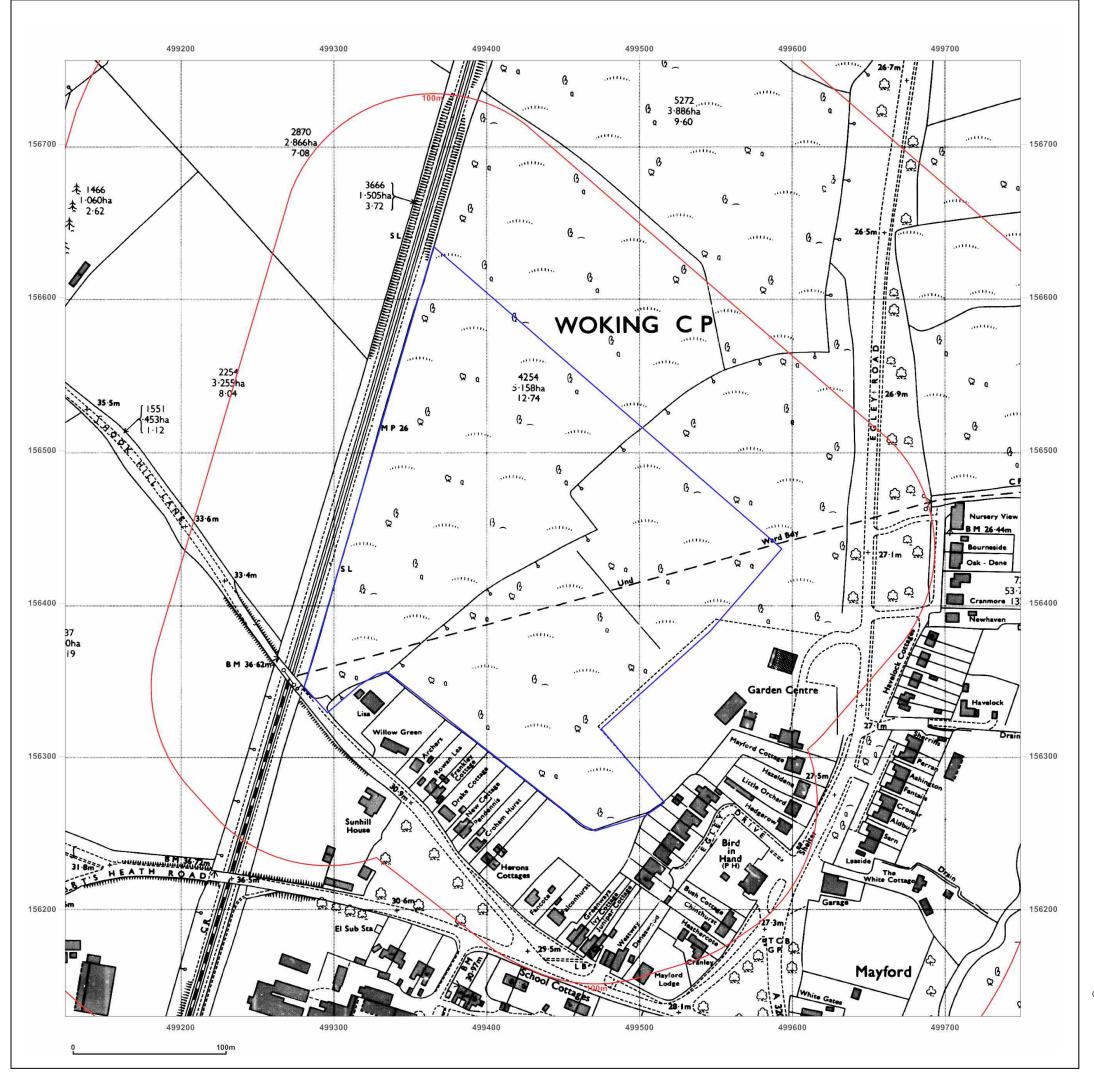




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Client Ref: P1381J1459-1 Report Ref: HMD-377-5286458 Grid Ref: 499437, 156442

Map Name: National Grid

Map date: 1971

Scale: 1:2,500

Printed at: 1:2,500

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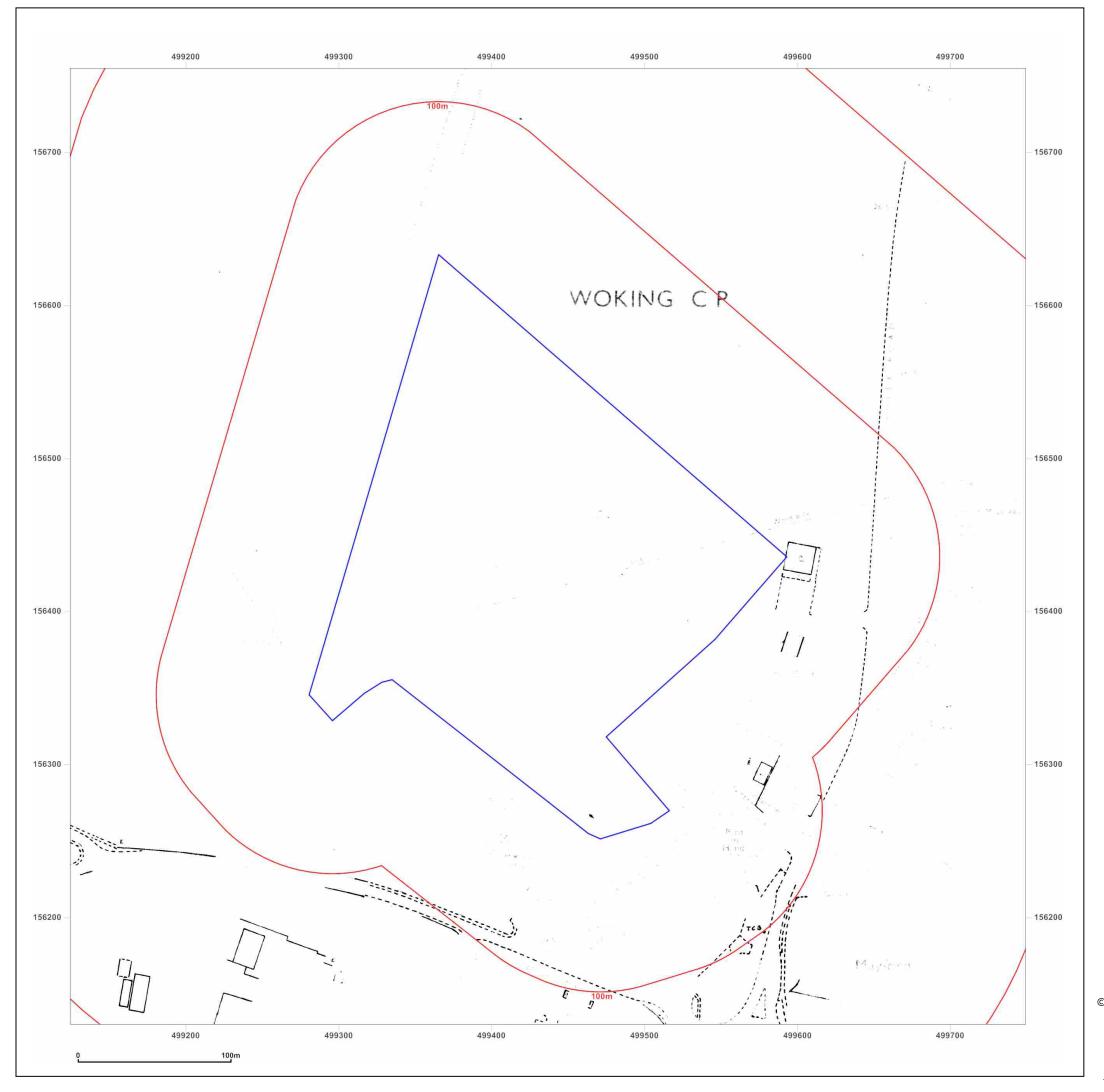


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 Client Ref:
 P1381J1459-1

 Report Ref:
 HMD-377-5286458

 Grid Ref:
 499437, 156442

Map Name: National Grid

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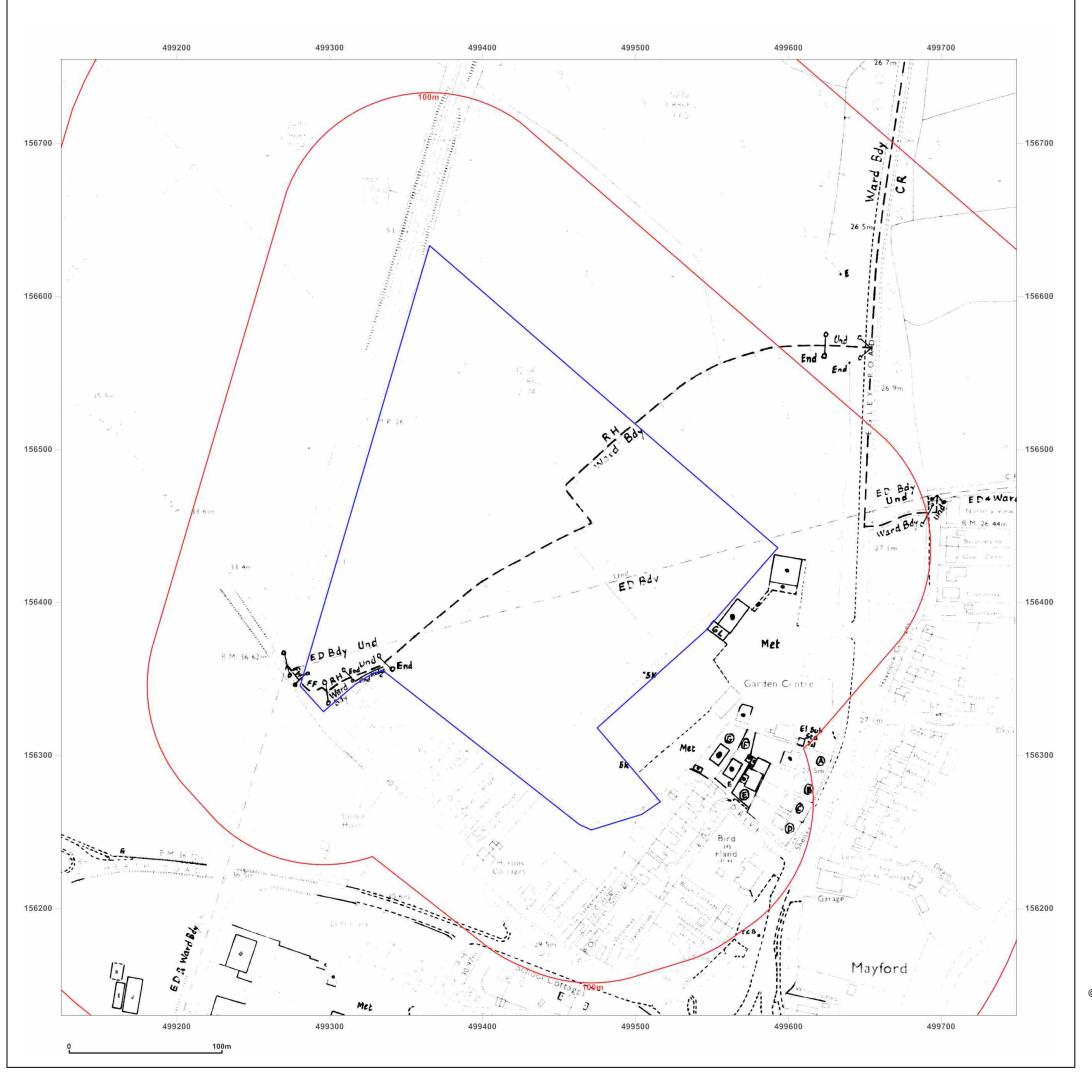


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 Client Ref:
 P1381J1459-1

 Report Ref:
 HMD-377-5286458

 Grid Ref:
 499437, 156442

Map Name: National Grid

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Scale: 1:2,500

Printed at: 1:2,500

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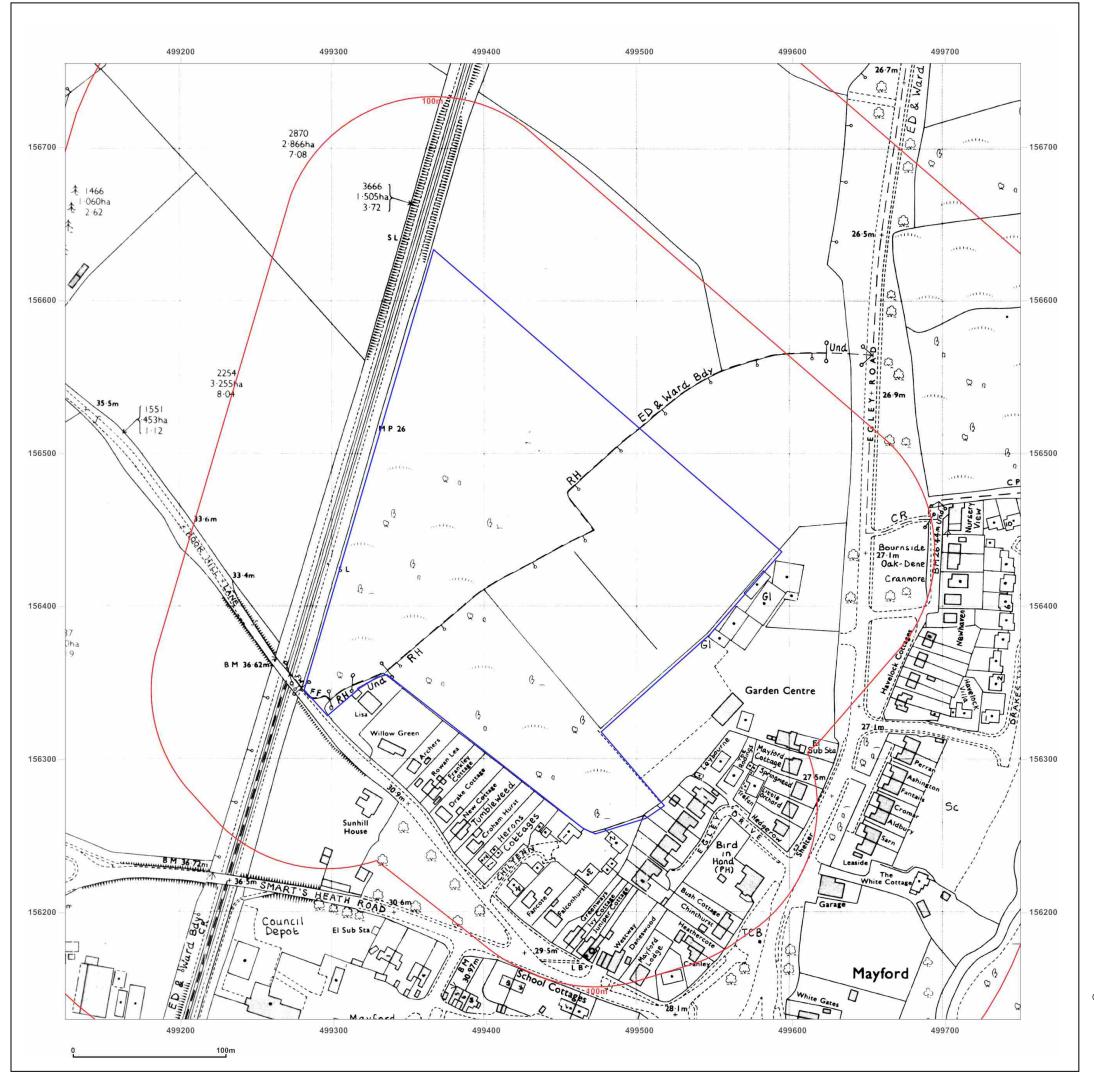


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Client Ref: P1381J1459-1
Report Ref: HMD-377-5286458
Grid Ref: 499437, 156442

Map Name: National Grid

Map date: 1987

Scale: 1:2,500

Printed at: 1:2,500

Surveyed 1987 Revised 1987 Edition N/A Copyright 1987 Levelled N/A



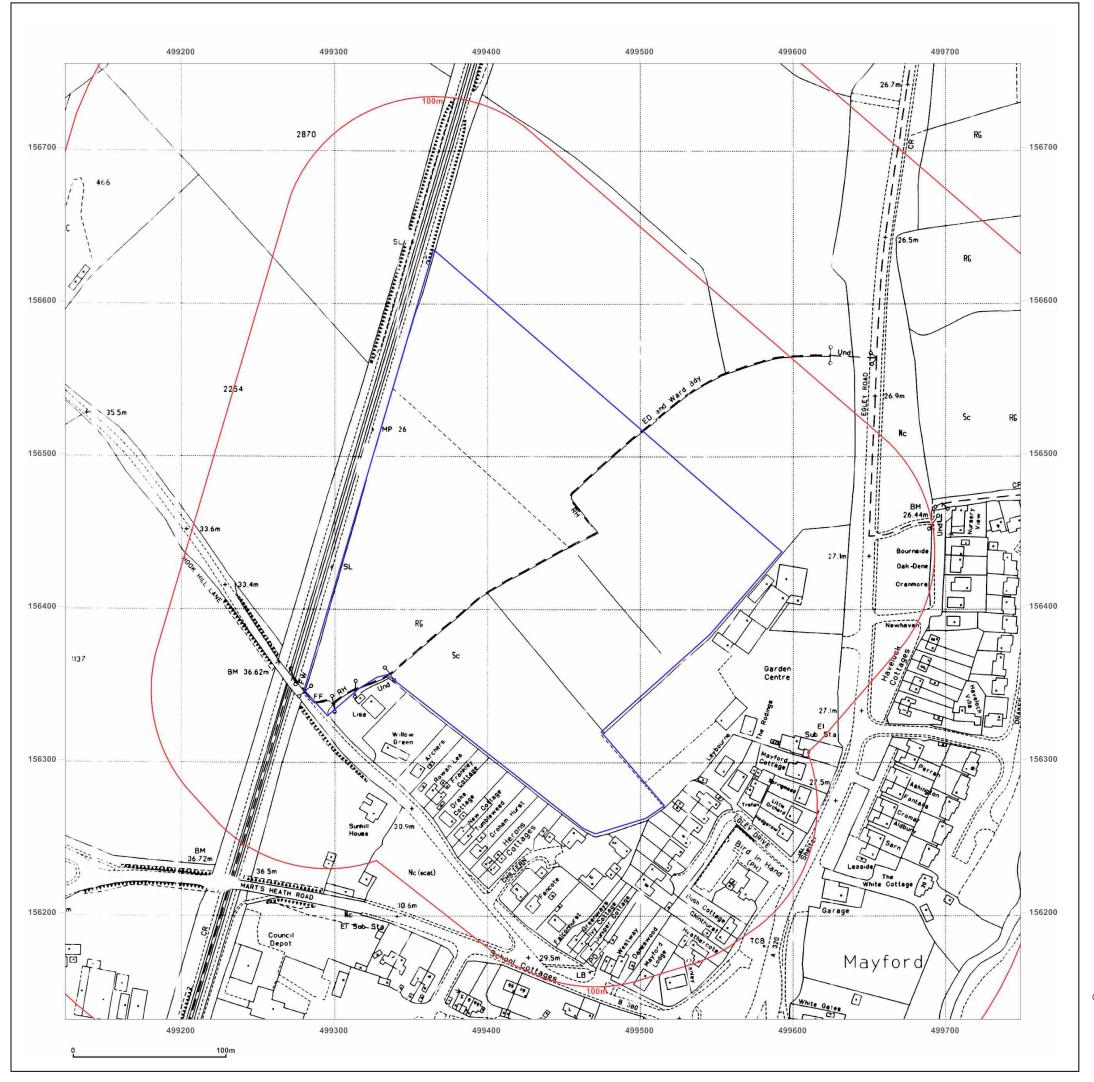


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Client Ref: P1381J1459-1 Report Ref: HMD-377-5286458 Grid Ref: 499437, 156442

Map Name: National Grid

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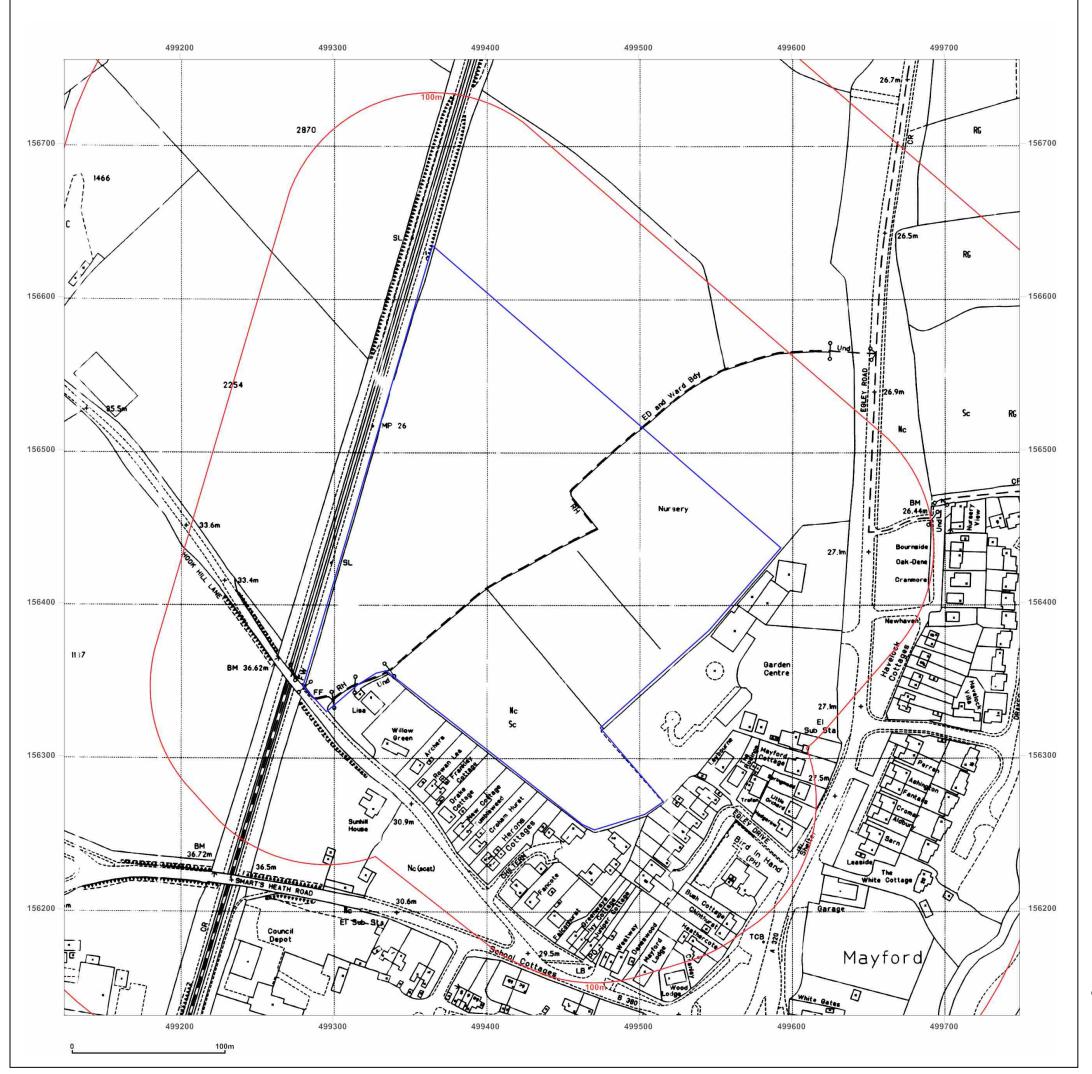


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LAND ADJACENT TO EGLEY ROAD, WOKING, GU22 ONJ

Client Ref: P1381J1459-1
Report Ref: HMD-377-5286458
Grid Ref: 499437, 156442

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

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Surveyed 1993 Revised N/A Edition N/A Copyright 1993 Levelled N/A



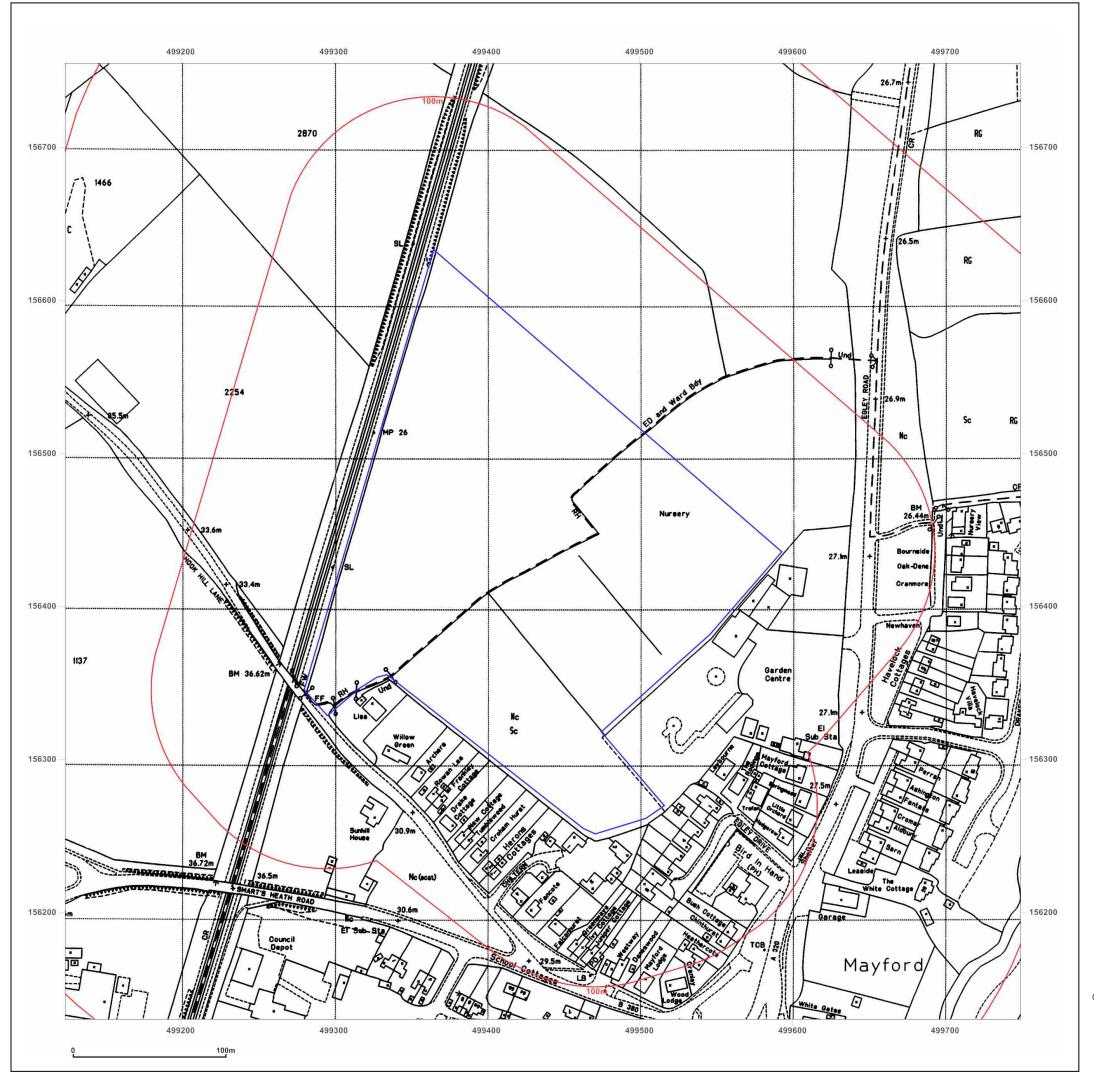


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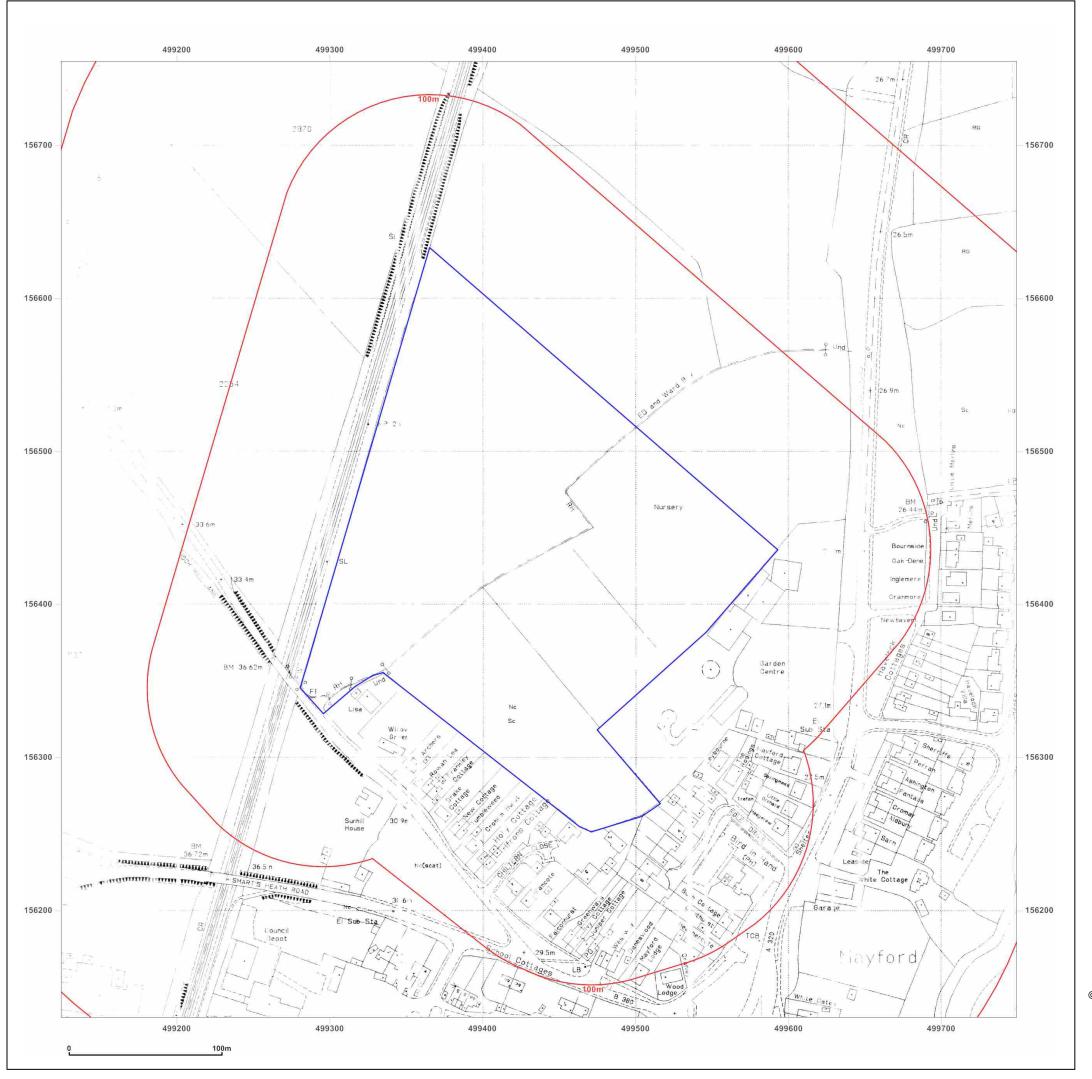


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Client Ref: P1381J1459-1 Report Ref: HMD-377-5286458 Grid Ref: 499437, 156442

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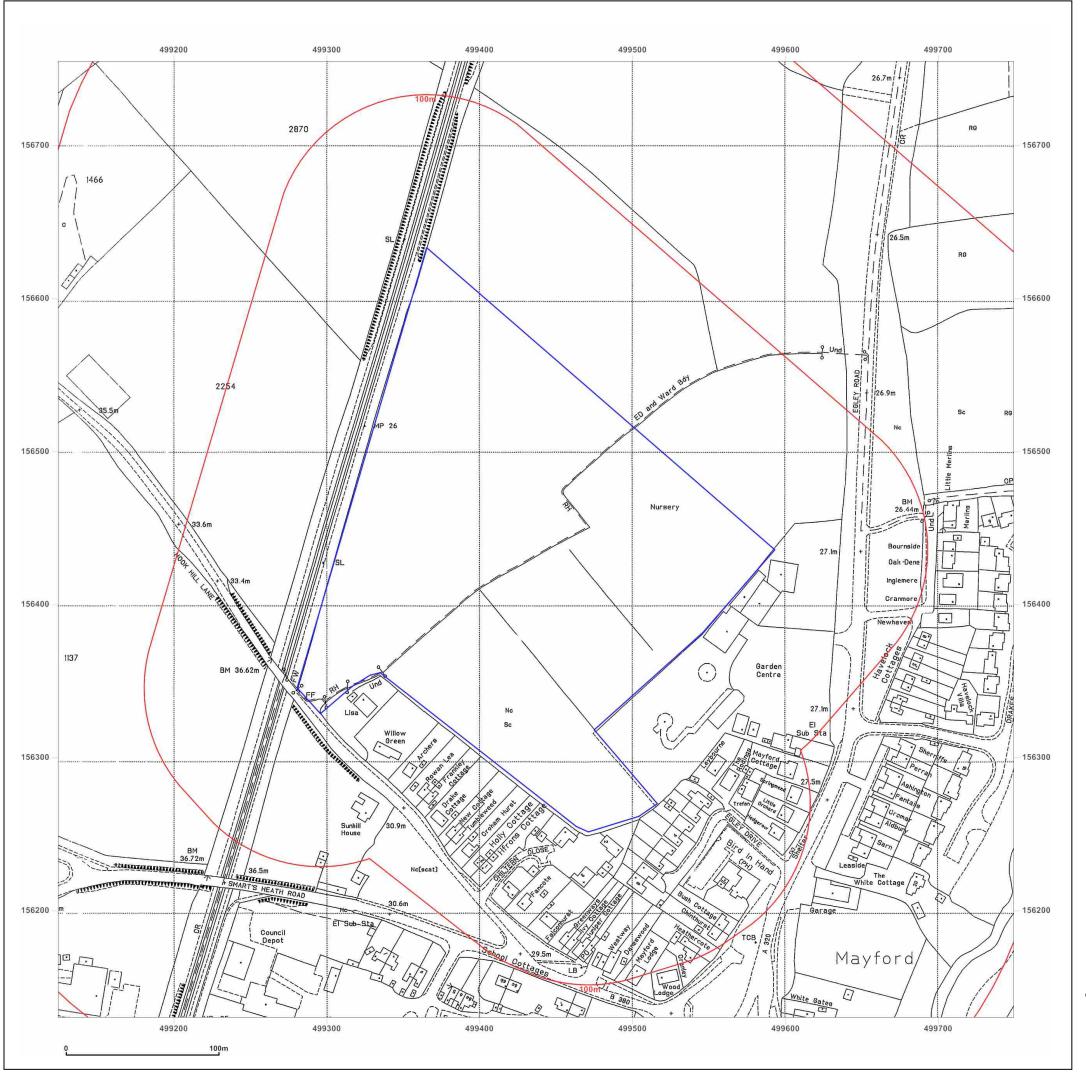


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Client Ref: P1381J1459-1 Report Ref: HMD-377-5286458 Grid Ref: 499437, 156442

Map Name: National Grid

Map date: 1995

Scale: 1:2,500

Printed at: 1:2,500

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APPENDIX 4 – QUALITATIVE RISK ASSESSMENT METHODOLOGY

QUALITATIVE RISK ASSESSMENT METHODOLOGY

The following Contaminated Land Risk Assessment methodology is based on CIRIA C552 (2001) Contaminated Land Risk Assessment – A Guide to Good Practice, in order to quantify potential risk via **risk estimation** and **risk evaluation**, which can be adopted at the Phase I stage. This will then determine an overall risk category which can be used to identify likely actions. This methodology uses qualitative descriptors and therefore is a qualitative approach.

The methodology requires the classification of:

- the magnitude of the **consequence** (severity) of a risk occurring, and
- the magnitude of the **probability** (likelihood) of a risk occurring.

The potential consequences of contamination risks occurring at this site are classified in accordance with Table A4.1 below, which is adapted from the CIRIA guidance.

Table A4.1: Classification of Consequence

Classification	Definition of Consequence		
Severe	Short-term (acute) risks to human health. Short-term risk of pollution of sensitive water resource or ecosystem. Catastrophic damage to crops/buildings/property/infrastructure, including offsite soils.		
Medium	 Medium/long-term (chronic) risks to human health. Medium/long-term risk of pollution of sensitive water resource or ecosystem. Significant damage to crops/buildings/property/infrastructure (on or off-site). Contamination of off-site soils. 		
Mild	 Easily preventable, permanent health effects on humans. Pollution of non-sensitive water resources. Localised damage to crops/buildings/property/infrastructure (on or off-site). 		
Minor	 Easily preventable, non-permanent health effects on humans, or no effects. Minor, low-level and localised contamination of on-site soils. Easily repairable damage to crops/buildings/property/infrastructure. 		

The probability of contamination risks occurring at this site will be classified in accordance with Table A4.2 below which is also adapted from the CIRIA guidance. Note that for each category, it is assumed that a pollution linkage exists. Where a pollution linkage does not exist, the likelihood is zero, as is the risk.

Table A4.2: Classification of Probability

Classification	Definition of Probability
High Likelihood	Circumstances are such that an event appears very likely in the short-term or almost inevitable in the long-term; or there is already evidence that such an event has occurred.
Likely	Circumstances are such that such an event is not inevitable, but is possible in the short-term and is likely over the long-term.
Low Likelihood	Circumstances are such that it is by no means certain that an event would occur even over a longer period, and it is less likely in the short-term.
Unlikely	Circumstances are such that it is improbable that an event would occur even in the very long-term.

For each possible pollution linkage (source-pathway-receptor) identified, the potential risk can be evaluated, as presented in Table A3.3. Based upon this, CIRIA C552 presents definitions of the risk categories, together with the investigatory and remedial actions that are likely to be necessary in each case, as in Table A3.4. These risk categories apply to each possible pollutant linkage, and not simply to each hazard/source of contamination or sensitive receptor.

Table A4.3: Overall Contamination Risk Matrix

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High likelihood	Very high risk	High risk	Moderate risk	Low risk
	Likely	High risk	Moderate risk	Moderate risk	Low risk
	Low likelihood	Moderate risk	Moderate risk	Low risk	Very low risk
	Unlikely	Low risk	Low risk	Very low risk	Very low risk

Table A4.4: Definition of Risk Categories and Likely Actions Required

Risk Category	Definition and likely actions required		
Very high	 Severe harm to a defined receptor is very likely, or has already occurred. The risk is likely to result in a substantial liability. Urgent investigation (if not already undertaken) is likely to be required. Urgent remediation is likely to be required. 		
High	 Harm to a defined receptor is likely. The risk, if realised, may result in a substantial liability. Urgent investigation (if not already undertaken) is likely to be required. Remediation is likely to be required in the long term, possibly sooner. 		
Moderate	 Harm to a defined receptor is possible, but severe harm is unlikely. Investigation is likely to be required to clarify the level of potential liability and risk. Some remediation may be required in the longer term 		
Low	 Harm to a defined receptor is possible, but is likely to be mild at worst. Liabilities could theoretically arise, but are unlikely. Further investigation is not required at this stage Remediation is unlikely to be required. 		
Very low	 Harm to a defined receptor is unlikely, and would be minor at worst. No liabilities are likely to arise. Further investigation is not required at this stage Remediation is very unlikely to be required. 		



APPENDIX 5 – LOCAL AUTHORITY CORRESPONDENCE

amm@jomasassociates.com

From: Justin Haves < Justin.Haves@woking.gov.uk>

Sent: 16 August 2018 08:49 **To:** 'amm@jomasassociates.com'

Subject: RE: P1381J1459 - Egley Road, Woking - Land Contamination Enquiry

Morning,

I have looked into this for you and based on the site plan I do not hold any further info myself, however it looks like a part of the site was used as a contractors compound area as part of the adjacent school redevelopment.

I would recommend contacting the local planning department to see if there are any specific reports on file for this area of the site. There are reports on planning files for the school redevelopment area that I am aware of, and these should be publically available via the planning portal as well.

Regards

Justin

Justin Haves

Contaminated Land Officer

Estate Management Department

Woking Borough Council, Civic Office, Gloucester Square, Woking, Surrey GU21 6YL

Telephone: 01483 743045 (department) 01483 743082 (direct office) **Web**: www.woking.gov.uk For general enquiries, please call Woking Borough Council's Contact Centre on 01483 755855

Follow @wokingcouncil

From: amm@jomasassociates.com [mailto:amm@jomasassociates.com]

Sent: 15 August 2018 11:30 **To:** Environmental Health **Cc:** eh@jomasassociates.com

Subject: P1381J1459 - Egley Road, Woking - Land Contamination Enquiry

Good Afternoon,

Jomas Associates Ltd have been appointed as environmental consultants with regards to land contamination issues for a site located at the land adjacent to Egley Road, Woking, GU22 OAF. The site location and boundary is shown below.



We are currently undertaking a Preliminary Risk Assessment / Phase 1 Desk Study for the site. As part of our investigations the following information sources will / have been consulted:

- ☐. Historical Ordnance survey mapping spanning dates 1849 2014.
- Environmental database report collating information from EA, BGS, Public Health England, Coal Authority, and Ordnance Survey sources (including recorded pollution incidents and licensing of potentially contaminative activities)
- ☐. BGS and EA geological and hydrogeological records
- □. A site walkover
- ☐. Available planning records from the Local Authority planning website

Does the Local Authority possess any additional information or records pertaining to land contamination issues at the site, which are not likely to be obtained via the above sources. Of principal interest would be:

- site investigation or remedial reports pertaining to the site or the site vicinity
- □. information relating to any potential landfilling in the site vicinity
- ☐. details of any private water supplies in the site vicinity
- □. any anecdotal information or specific local concerns that the local authority has / is aware of with regards land contamination in the site vicinity
- any local mapping resources which are unlikely to be supplied from Ordnance Survey

Records of tanks or fuel storage at the site

Kind regards,

Alex Marcelo BSc (Hons) **Geotechnical Engineer**

M: 07403 927 087 / T: 0843 289 2187 / E: amm@jomasassociates.com

A: Lakeside House, 1 Furzeground Way, Stockley Park, UB11 1BD Follow Us for Updates: Website / Facebook / Twitter / Linkedin

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Jomas Associates are in the **TOP 10 WINNERS** for **TWO** Construction Enquirer Awards. If you haven't voted for us already, please click the links below to vote for us (it takes less than a minute): 'Best Construction Supplier to Work With' & 'Best Consultant to Work For'





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Telephone: +44 (0)1737 276000

Website: http://www.reigate-banstead.gov.uk