APPENDICES

APPENDIX 1 – FIGURES

JOMAS ASSOCIATES LTD
T: 0843 289 2187

Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Project No.	P1608J1437	**Date**	11/07/2018
Title	Site Location Plan	**Prepared By**	AM



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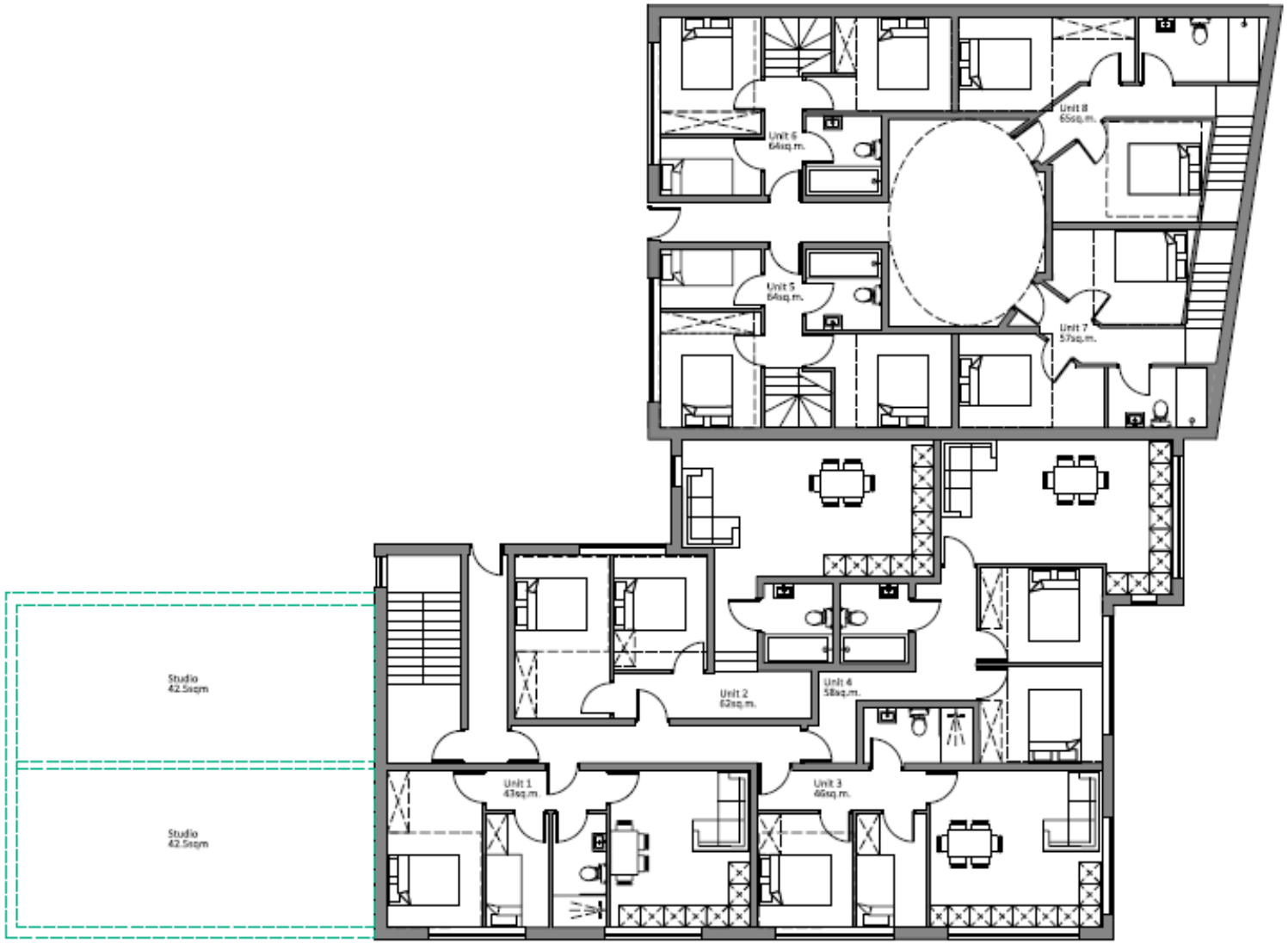
Project Name	1200 Uxbridge Road, UB4 8JD	**Client**	Diamond Corporation
Title	Constraints Plan	**Project No**	P1608J1437
Date	11/07/2018		



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Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Project No.	P1608J1437	**Date**	11/07/2018
Title	Proposed Ground Floor	**Prepared By**	AM

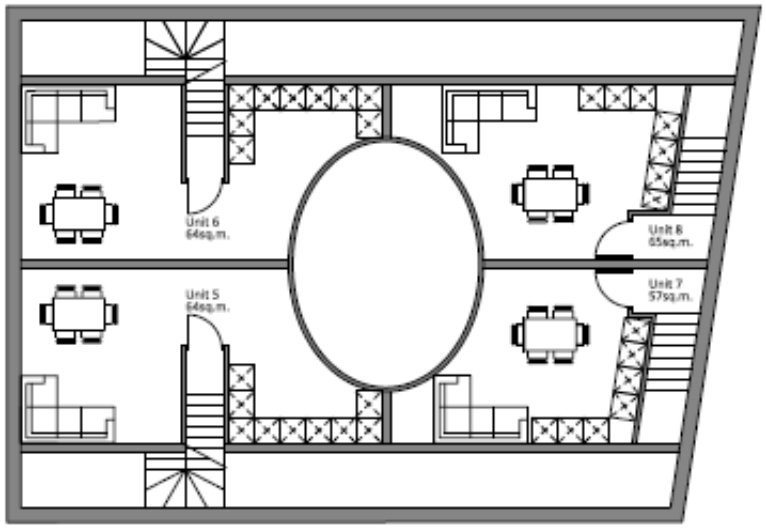
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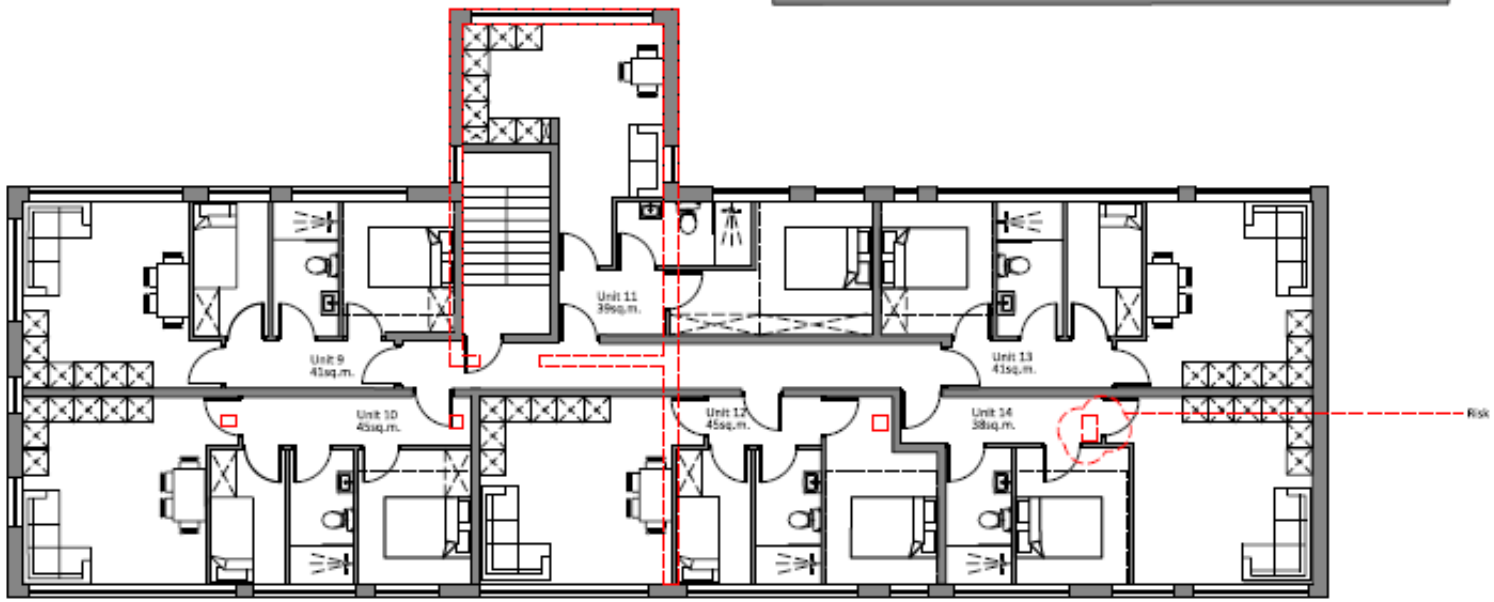


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Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Project No.	P1608J1437	**Date**	11/07/2018
Title	Proposed First Floor	**Prepared By**	AM

N

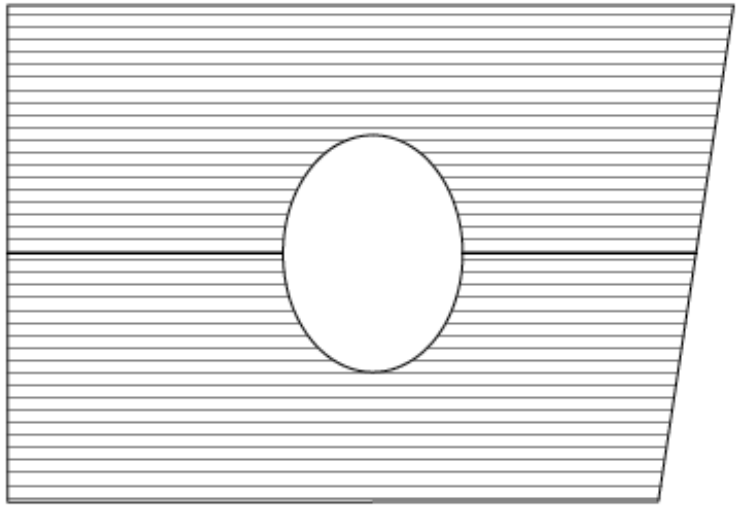


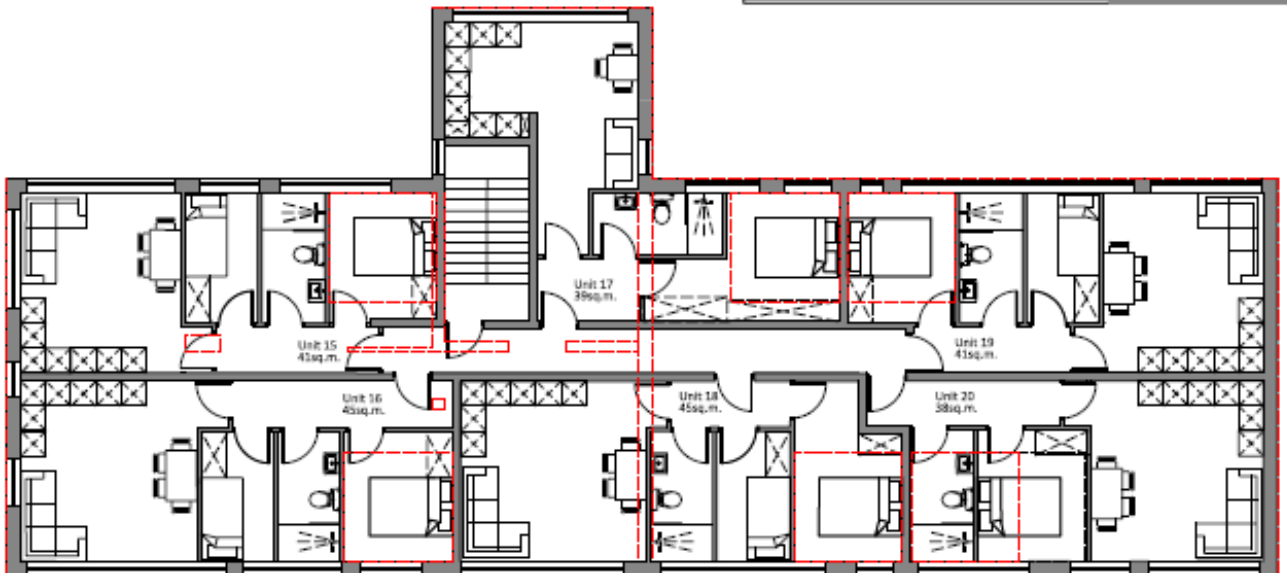


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Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Project No.	P1608J1437	**Date**	11/07/2018
Title	Proposed Second Floor	**Prepared By**	AM

N





JOMAS ASSOCIATES LTD

Project Name	1200 Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 1: 1200 Uxbridge Road as viewed southeast from Newport Road. Note the eastern portion of the building is supported with columns and has a carpark at ground level.



Photo 2: Pedestrian access to the building, viewed east.



Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 3: Vehicular access to warehouse via shutter doors.



Photo 4: Warehouse in northern section of site, used for storage of documents and office equipment. Note potential asbestos cement sheets in roof.



Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 5: Access to boiler room via doors in carpark.



Photo 6: Gas boiler heating system.



Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 7: The sitem as viewed northeast from Uxbridge Road.



Photo 8: Area of asphalt onsite to the south of the main building, viewed east. Note MOT garage adjacent to the eastern site boundary.



Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 9: Carparking area and warehouse building in northern section of the site, viewed east.



Photo 10: Limited areas of soft landscaping within car park.



Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 11: Pedestrian fire exit on eastern wall of building.



Photo 12: Internal view of the site reception.



Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 13: Internal corridor.

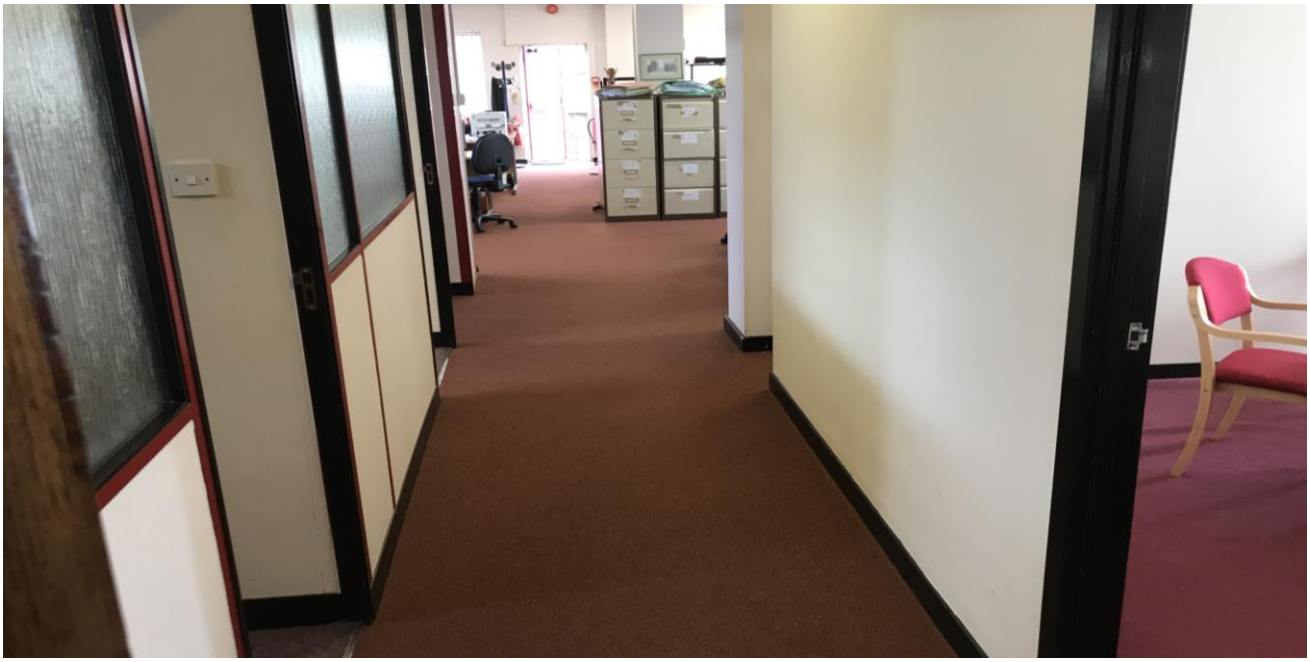


Photo 14: Internal office/meeting room.



Project Name	Uxbridge Road, Hayes	**Client**	Diamond Corporation
Title	Photos from Walkover	**Project**	P1608J1427

Photo 15: Internal staircase.



Photo 16: Waste store in wheelie bins in western portion of the carpark.



APPENDIX 2 – GROUNDSURE REPORTS

Specialists in the investigation & reclamation of brownfield sites

Jomas Associates Ltd

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

Report Reference: HMD-377-5203807

Your Reference: P16081437-1

Report Date 6 Jul 2018

Report Delivery Method: Email - pdf

Geo Insight

Address: 1200 UXBRIDGE ROAD, HAYES, UB4 8JD

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:	**1200 UXBRIDGE ROAD, HAYES, UB4 8JD**
Date:	**6 Jul 2018**
Reference:	**HMD-377-5203807**
Client:	**Jomas Associates Ltd**

NW N NE

W E



SW S SE

Aerial Photograph Capture date:	07-Jun-2015
Grid Reference:	508805,181886
Site Size:	0.12ha

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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?*	Yes
	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 features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	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: Geology 1:50,000 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?*	Yes
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	Yes
	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 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.
	3.2Radon Protection	No radon protective measures are necessary.

Section 4: Ground Workings	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	3	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	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

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-site
6.1 Shrink-Swell Clay	Low
6.2 Landslides	Very Low
6.3 Ground Dissolution of Soluble Rocks	Negligible
6.4 Compressible Deposits	Negligible
6.5 Collapsible Deposits	Very Low
6.5 Running Sand	Very Low

Section 7: Borehole Records	On-site	0-50m	51-250
7 BGS Recorded Boreholes	0	0	1

Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250
8 Records of Background Soil Chemistry	1	0	0

Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500
9.1 Tunnels	0	0	0	Not Searched
9.2 Historical Railway and Tunnel Features	0	0	0	Not Searched
9.3 Historical Railways	0	0	0	Not Searched
9.4 Active Railways	0	0	0	Not Searched
9.5 Railway Projects	0	0	0	0

1:10,000 Scale Availability

NW N NE

W E

SW S SE



1_10,000 Availability Legend

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Site Outline

Full Coverage

Partial Coverage

No Coverage

50
250
Search Buffers (m)

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	1171.0	Some deposits are mapped	Full	Full	No coverage
N3	1864.0	Some deposits are mapped	Full	Full	No coverage

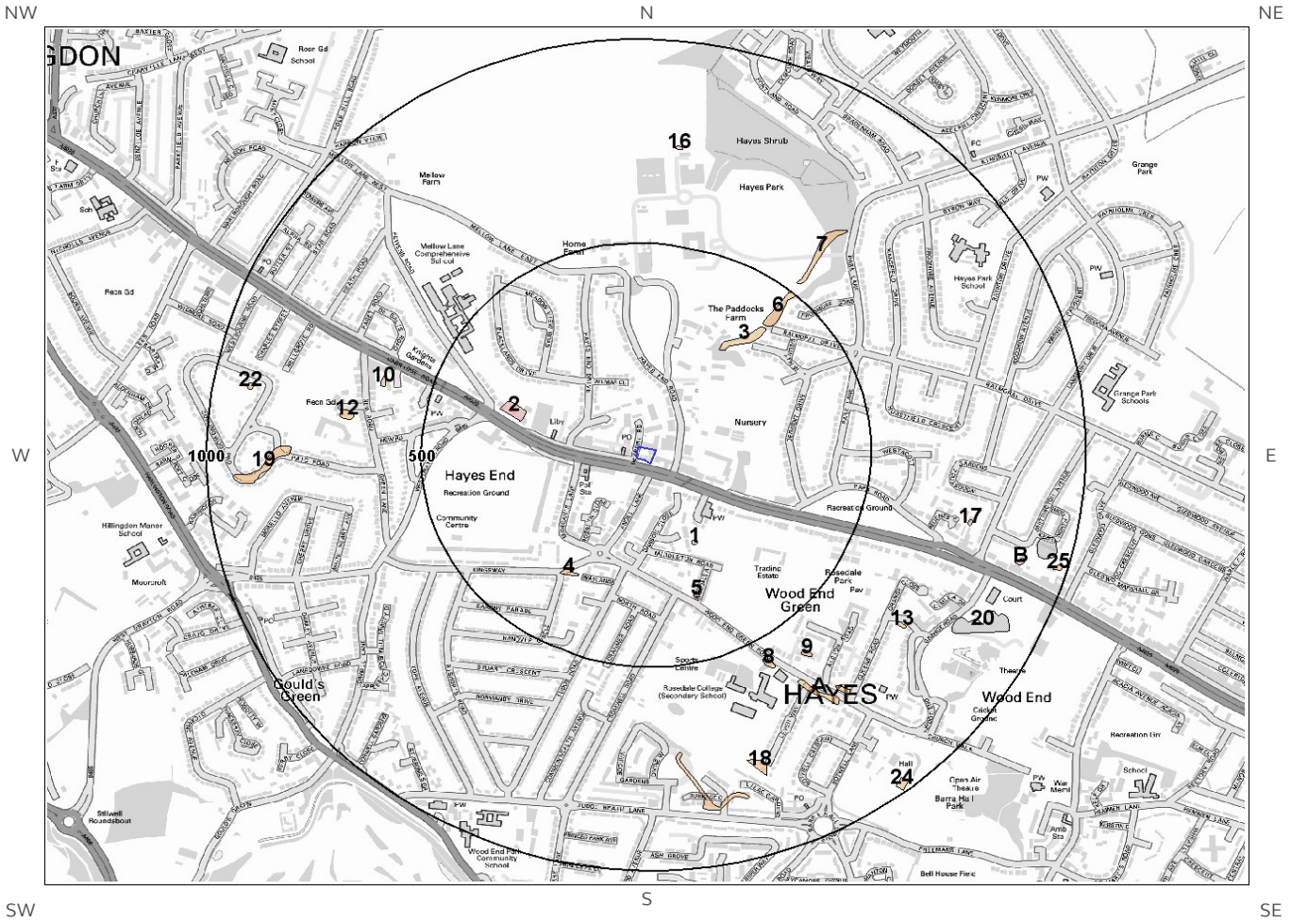
Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not 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)



Artificial Ground Legend

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Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Disturbed Ground (undivided)

Worked Ground (undivided)

Landscaped Ground (undivided)

Infilled Ground

Reclaimed Ground

1. Geology 1:10,000 scale

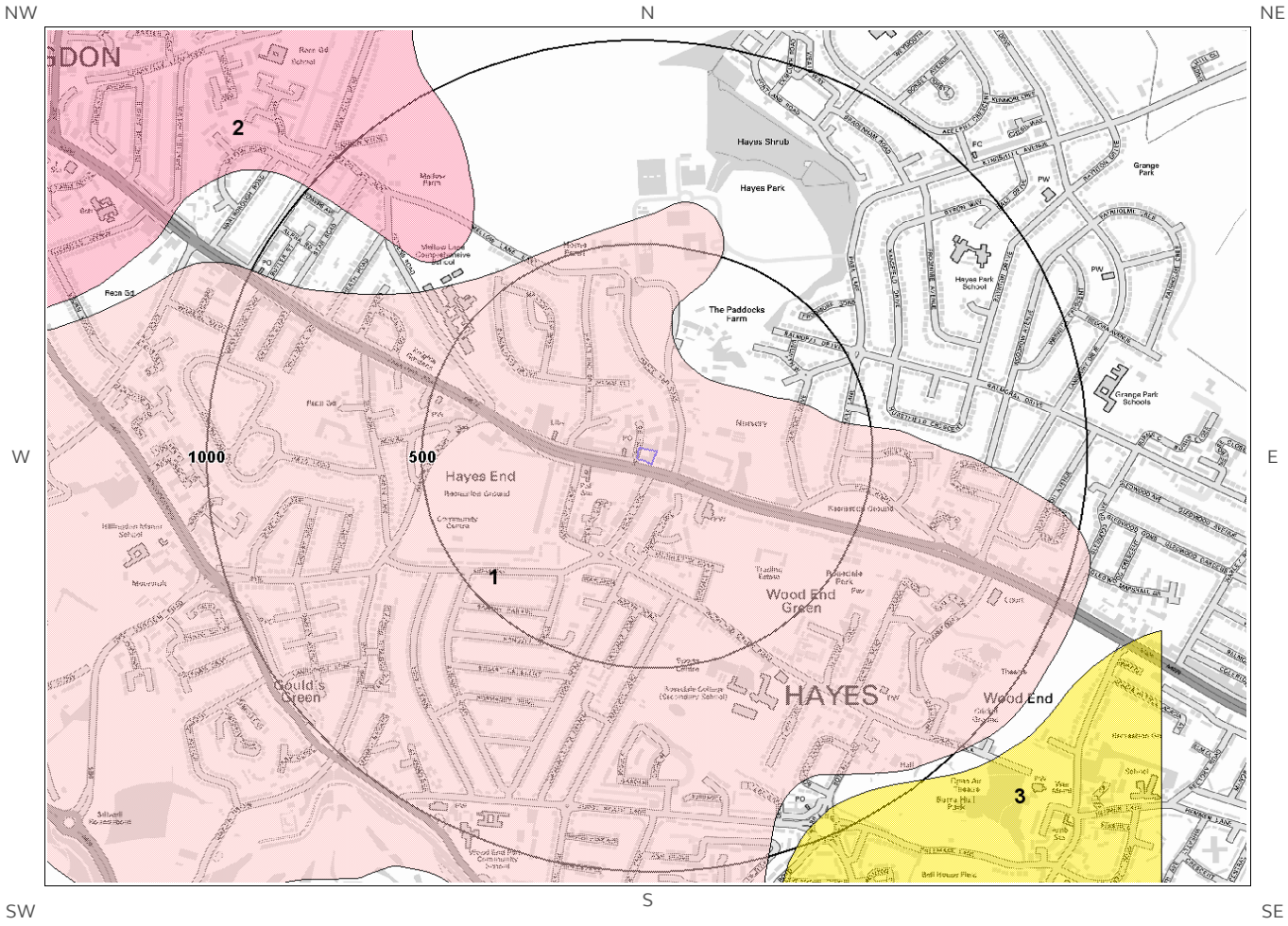
1.1 Artificial Ground

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

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

ID	Distance	Direction	LEX Code	Description	Rock Description
1	213.0	SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	274.0	W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
3	286.0	NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	314.0	SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
5	332.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	398.0	NE	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

500
1000
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? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	BHT-XSV	Boyn Hill Gravel Member - 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?

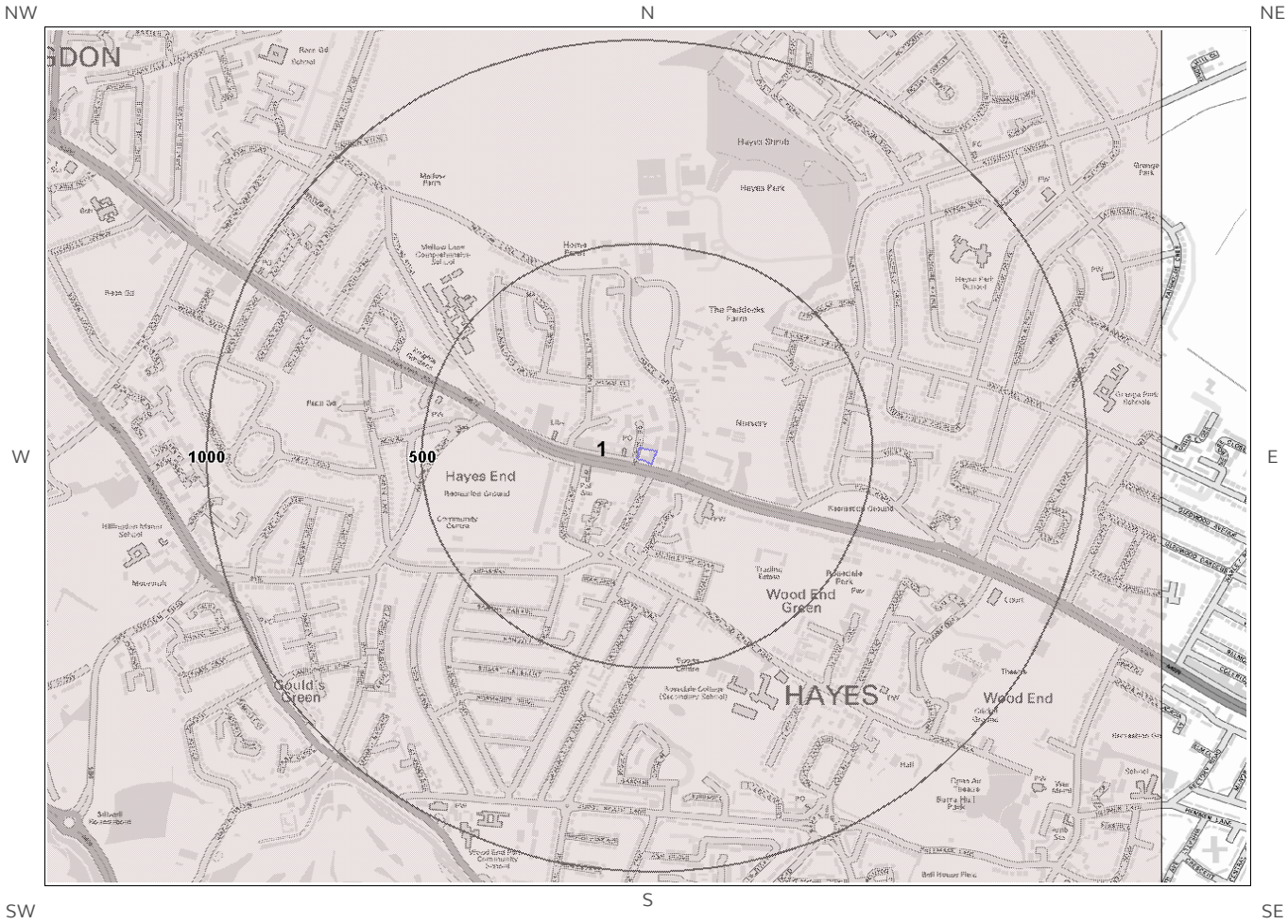
No

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
1000
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	LC-CLSISA	London Clay Formation - Clay, Silt And 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

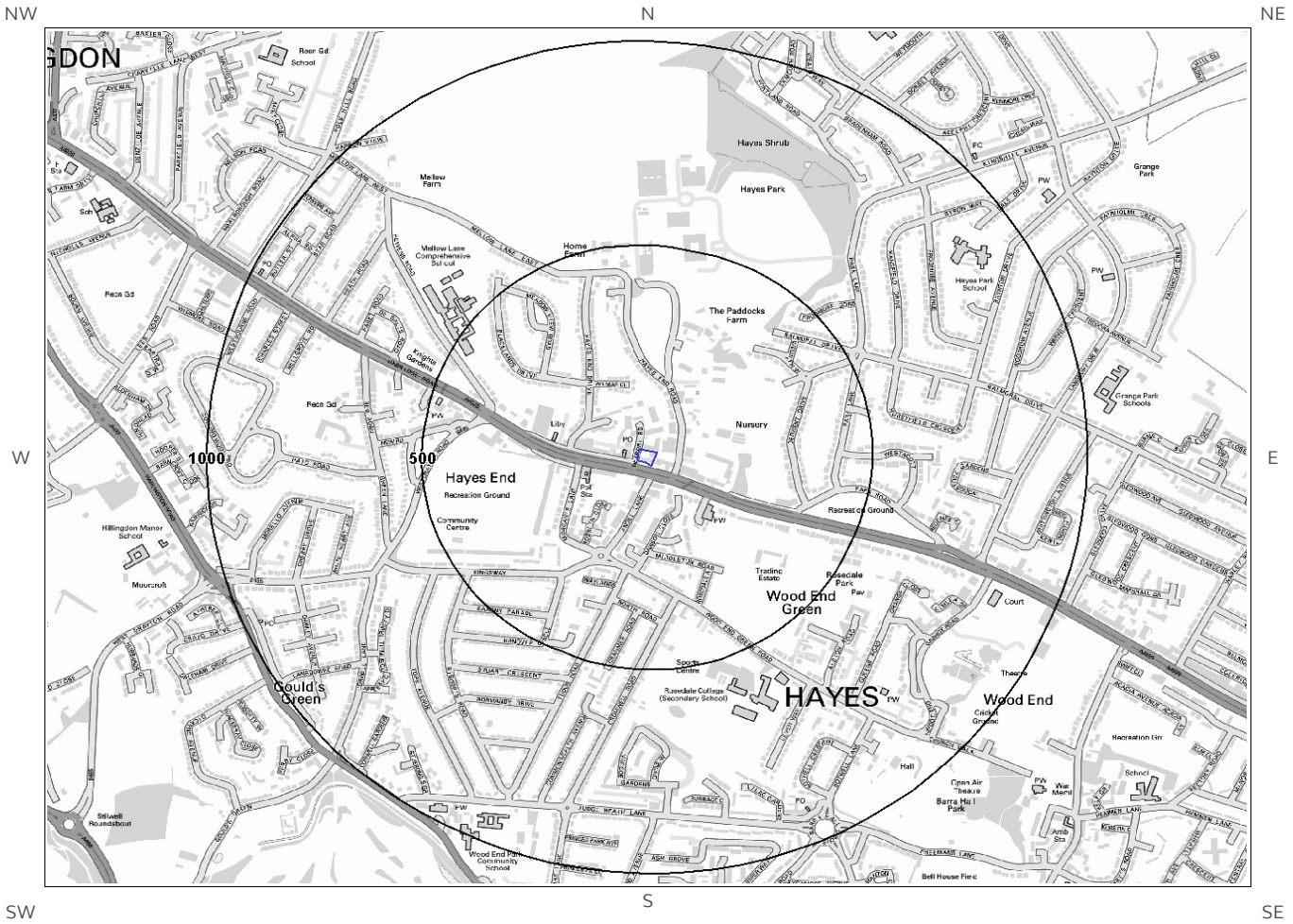
Database searched and no data found at this scale.

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 Scale

2.1 Artificial Ground map



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Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Disturbed Ground (undivided)

Worked Ground (undivided)

Landscaped Ground (undivided)

Infilled Ground

Reclaimed Ground

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: 255

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? No

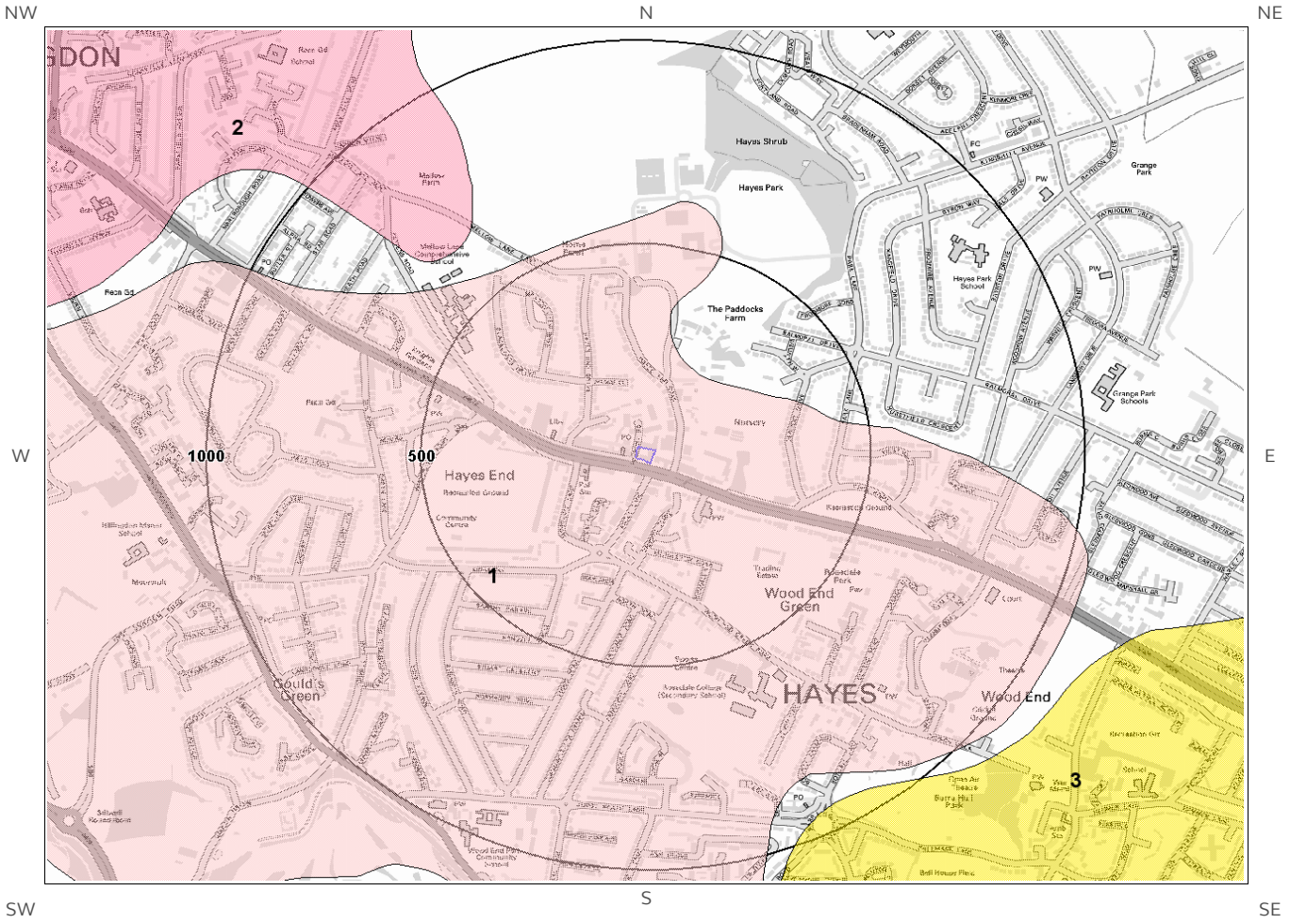
Database searched and no data found.

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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Site Outline

500
1000
Search Buffers (m)

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	0.0	On Site	BHT-XSV	BOYN HILL 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? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	Very High	High

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.

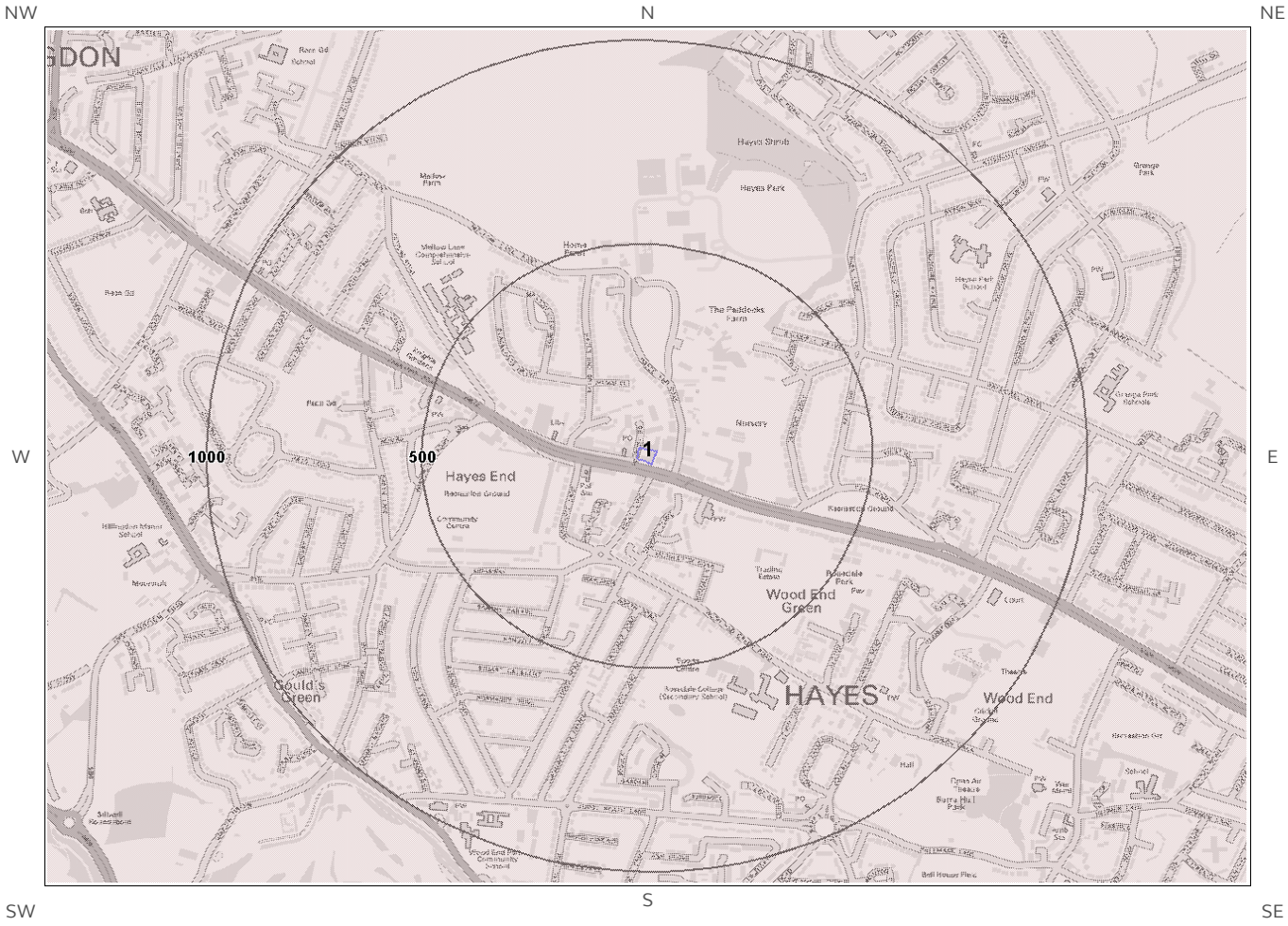
This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

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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Site Outline

500
1000
Search Buffers (m)

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: 255

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	LC-XCZS	LONDON CLAY FORMATION - CLAY, SILT AND SAND	YPRESIAN

2.3.2 Permeability of Bedrock Ground

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

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Moderate	Very Low

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.

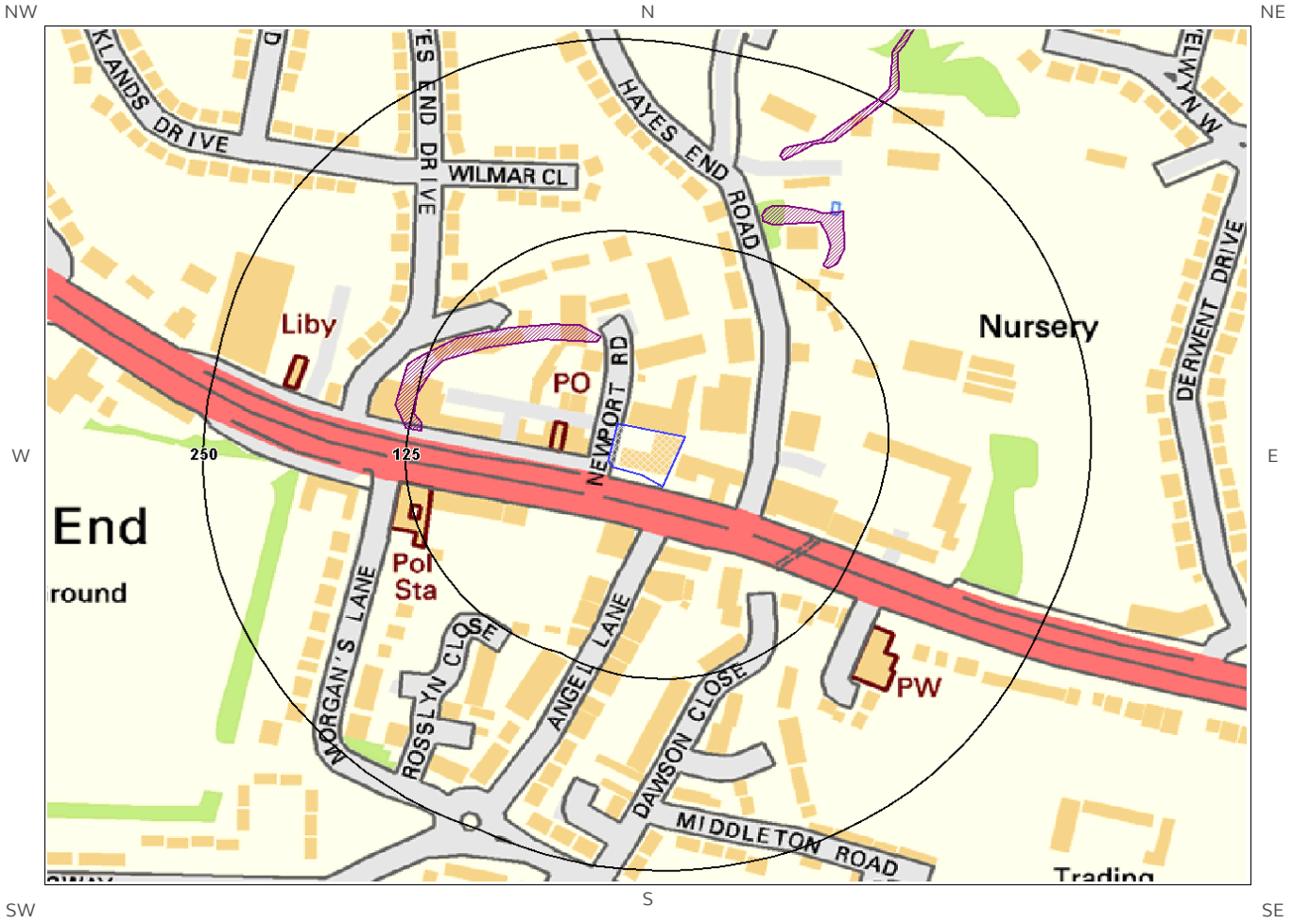
The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, 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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Site Outline

125
250
Search Buffers (m)

Historic Surface Ground Workings

Historic Underground Workings

Current Ground Workings

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	54.0	N	508662 181935	Water Body	1865
2	141.0	NE	508922 182026	Ponds	1865
3	190.0	N	508957 182123	Pond	1865

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.

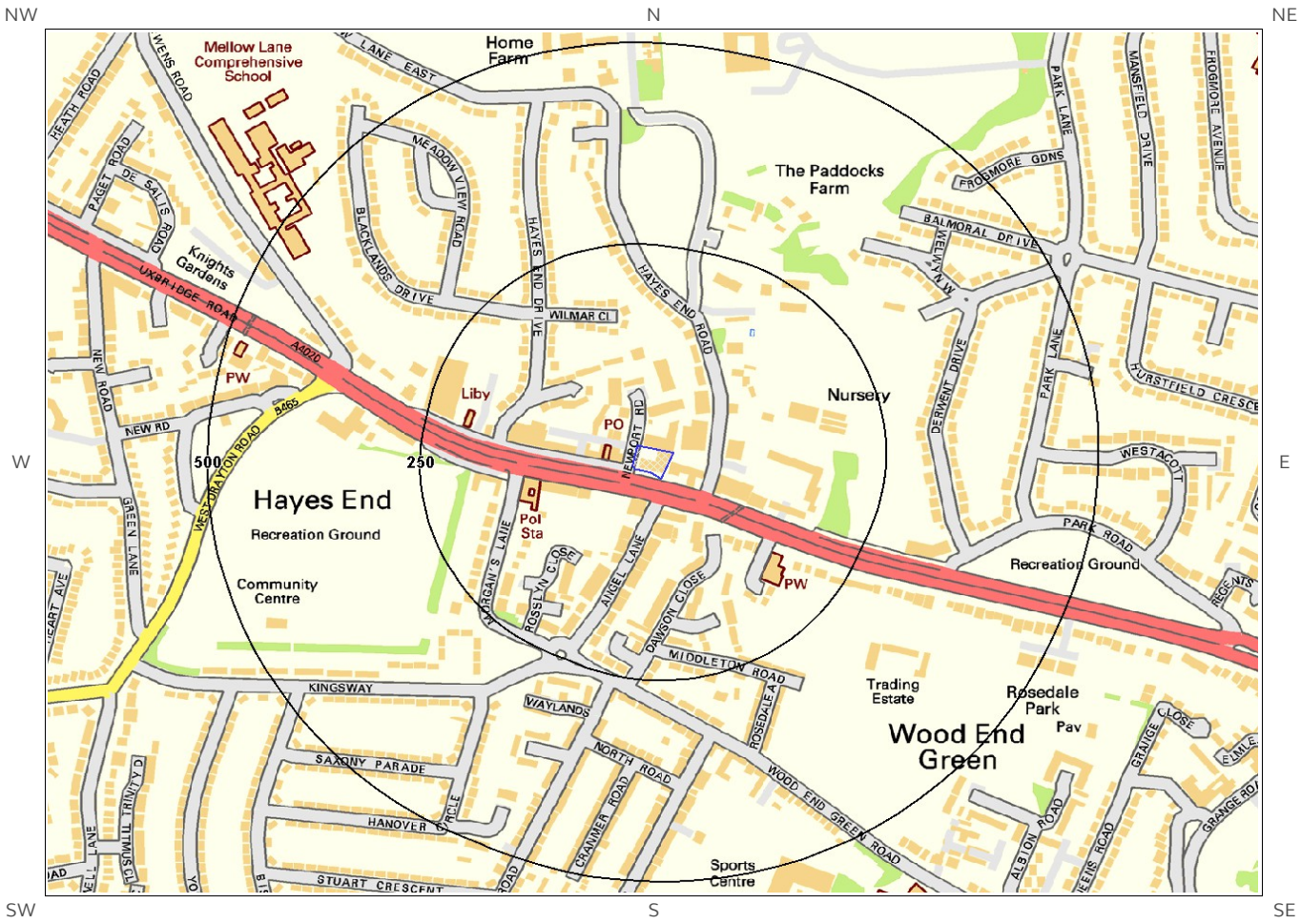
4.3 Current Ground Workings

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



Mining, Extraction and Natural Cavities Legend

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Site Outline

Search Buffers (m) — 250 — 500

Historical Mining

Non-Coal Mining Cavities

Natural Cavities (point data)

Natural Cavities (polygon data)

Non-Coal Mining

- Highly likely
- Likely
- Unlikely
- Highly unlikely
- Rare

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? No

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

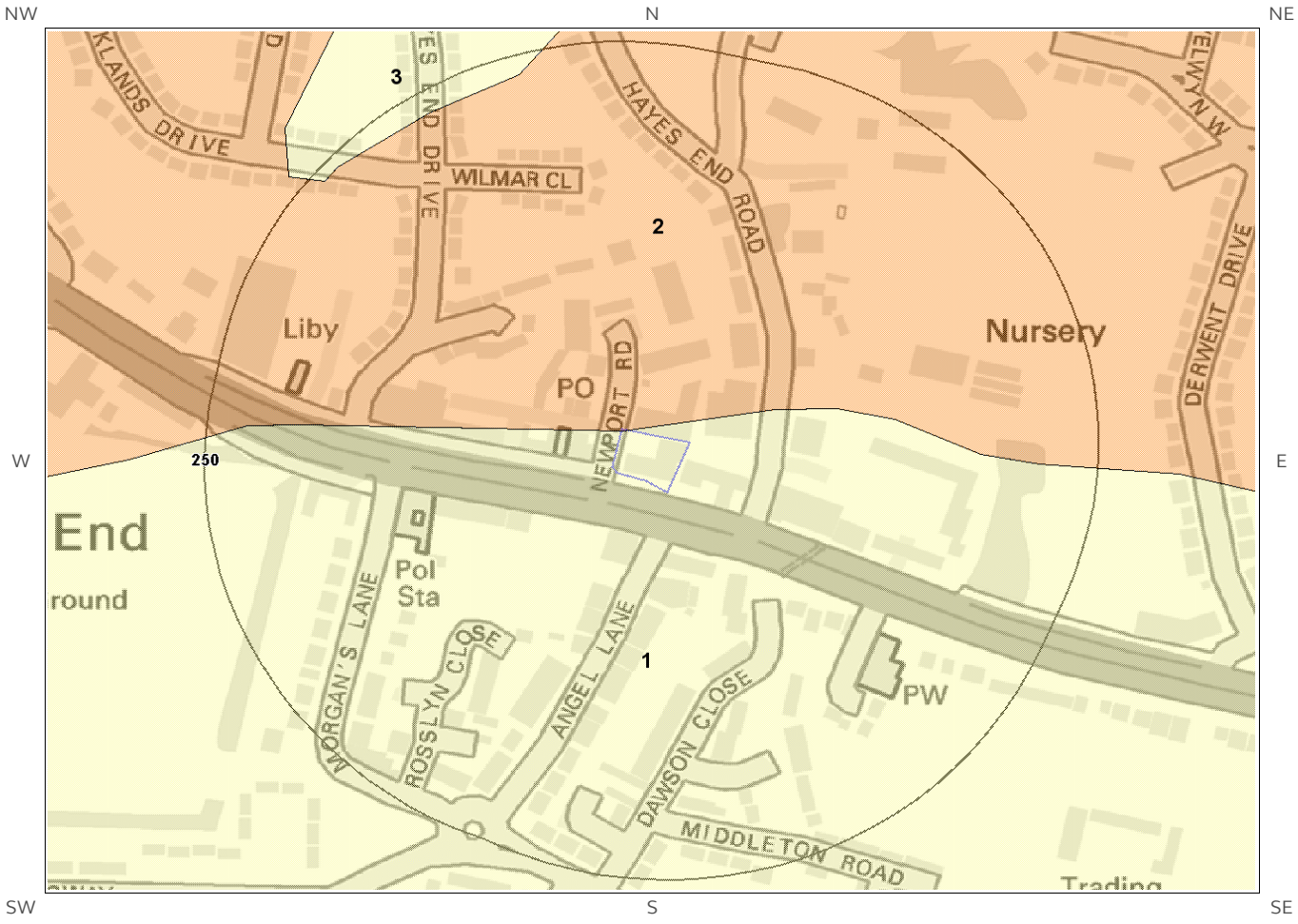
This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map



Shrink Swell Clay Legend

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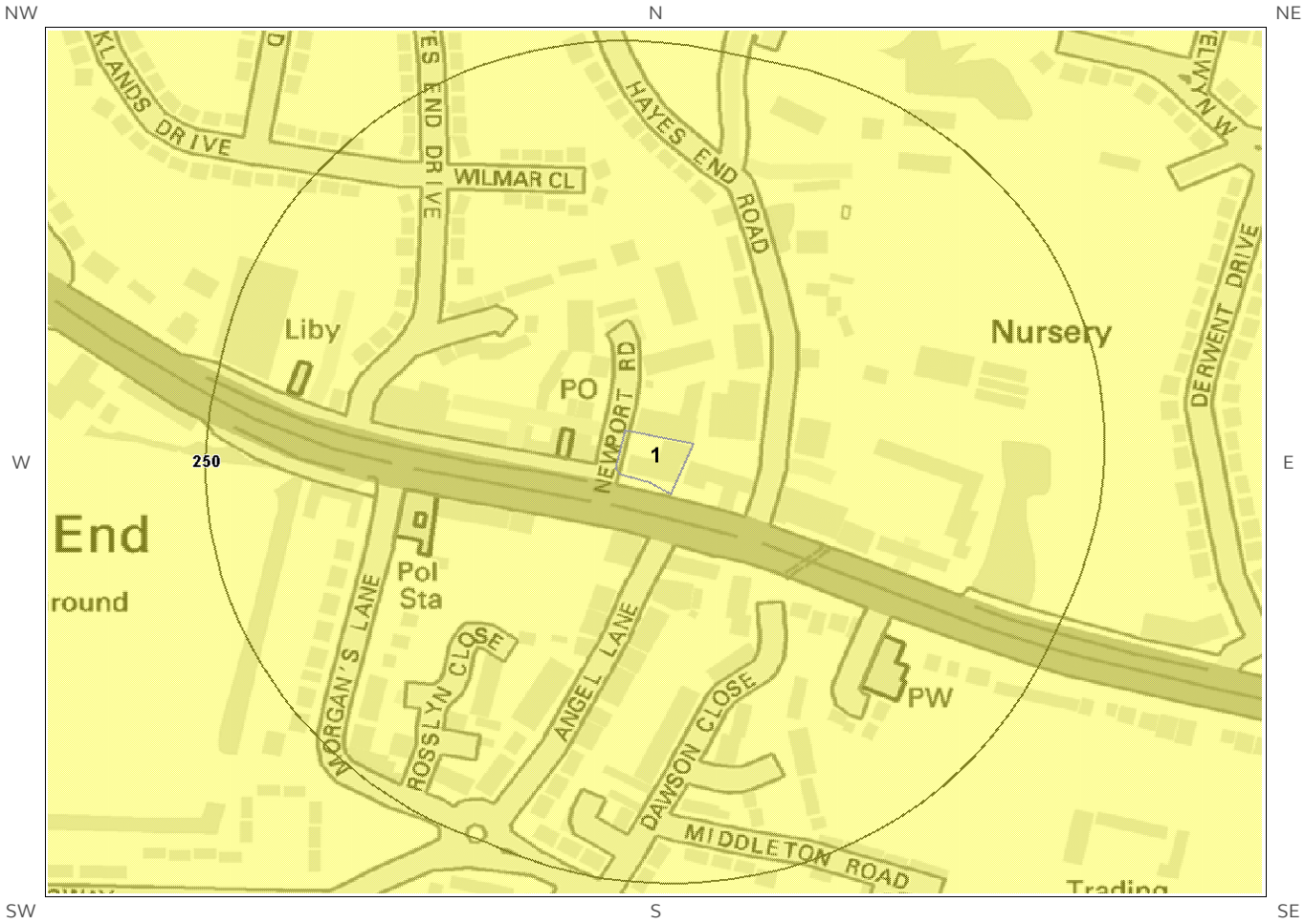
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.2 Landslides map



Landslides Legend

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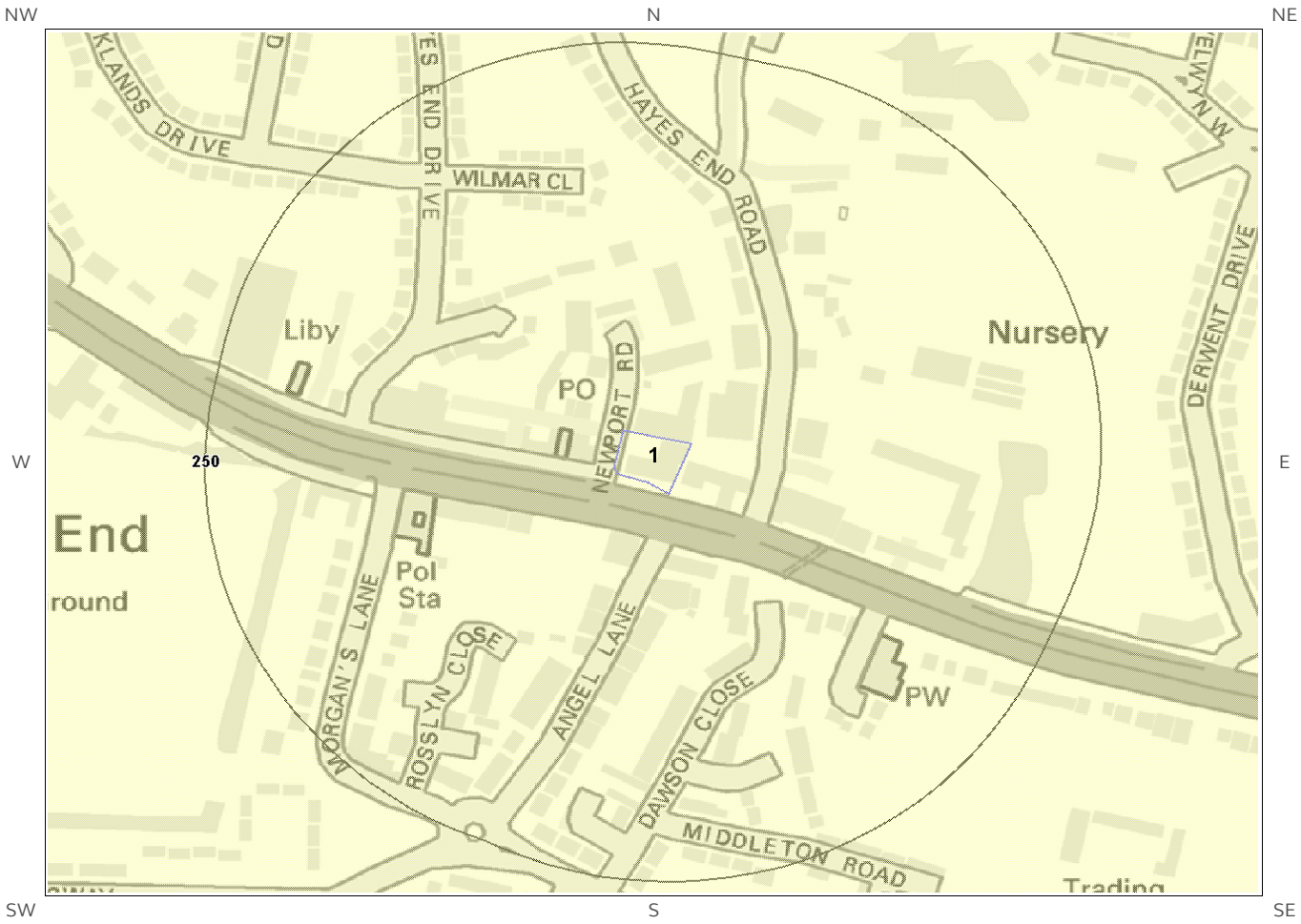
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.3 Ground Dissolution of Soluble Rocks map

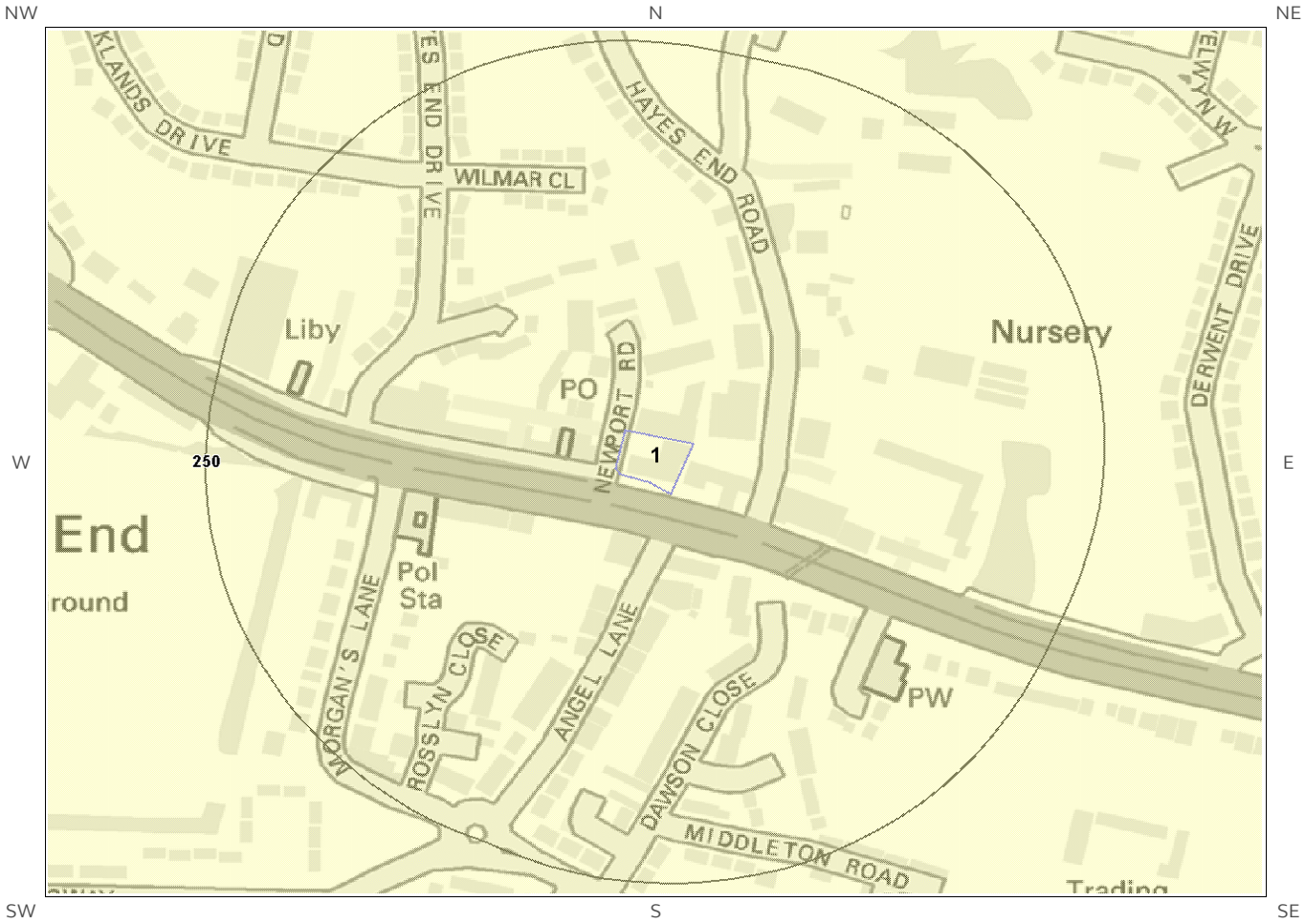


Ground Dissolution Soluble Rocks Legend

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6.4 Compressible Deposits map

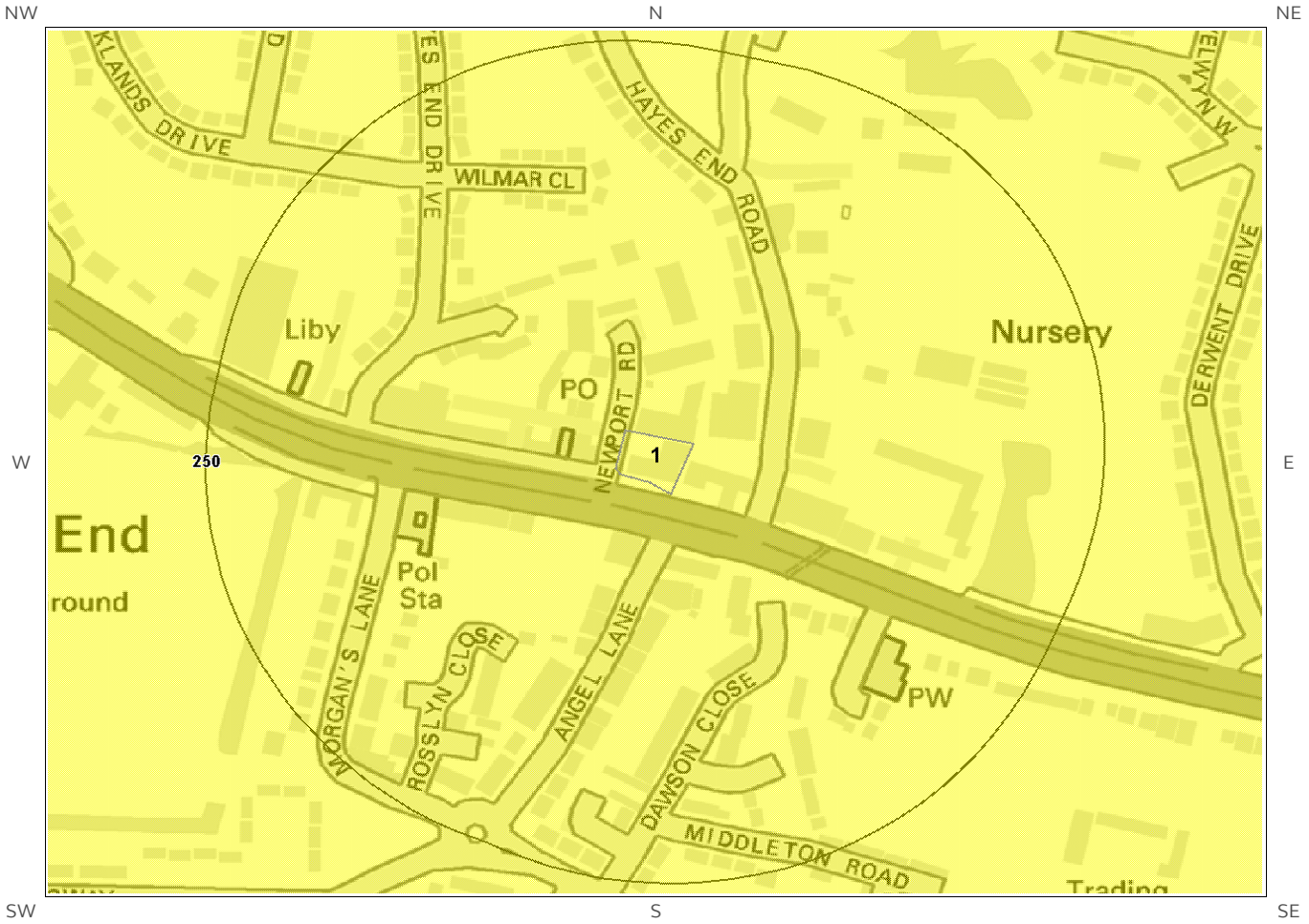


Compressible Deposits Legend

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6.5 Collapsible Deposits map

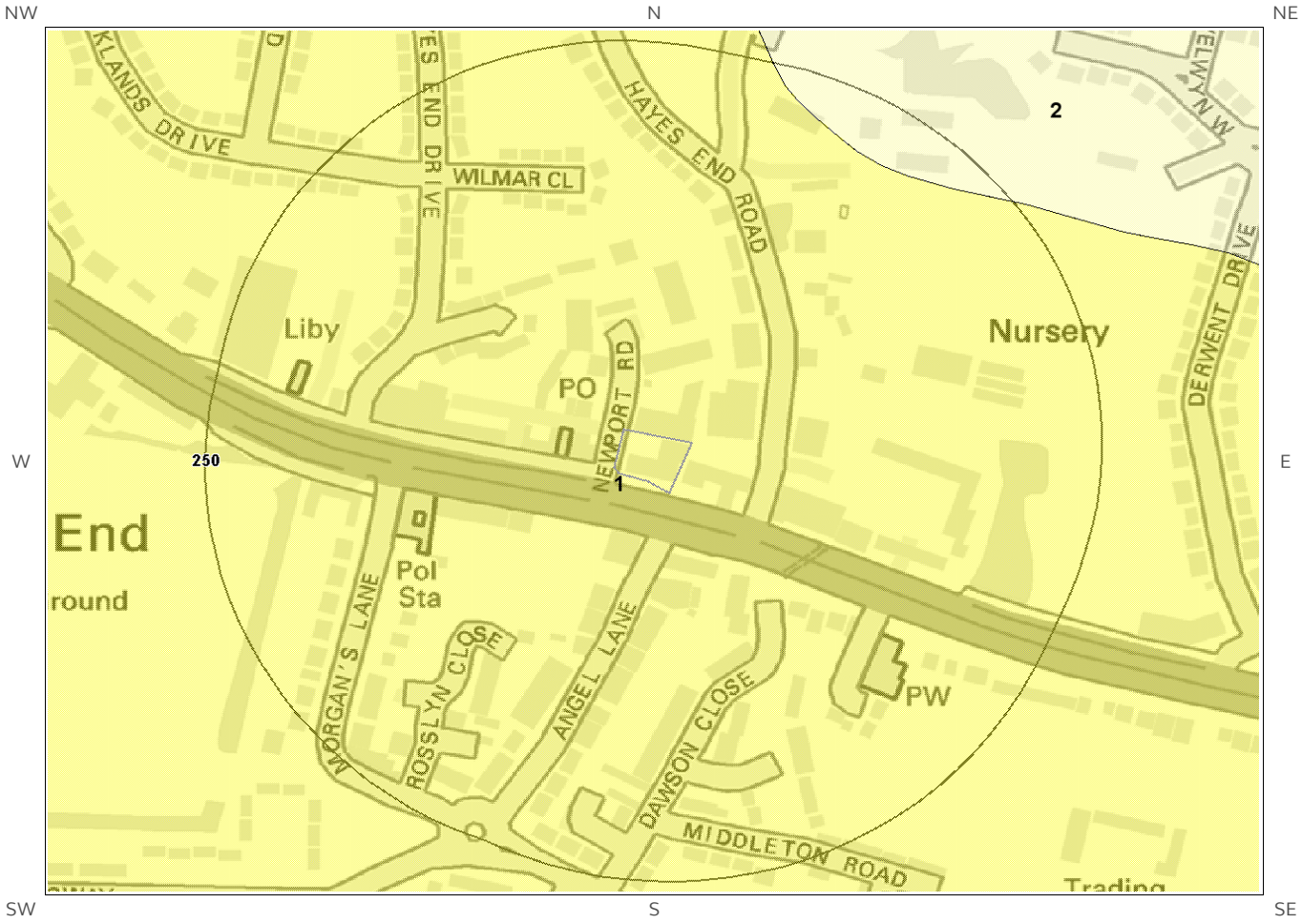


Collapsible Deposits Legend

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6.6 Running Sand map



Running Sand Legend

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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.
2	0.0	On Site	Low	Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

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.

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

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.

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:

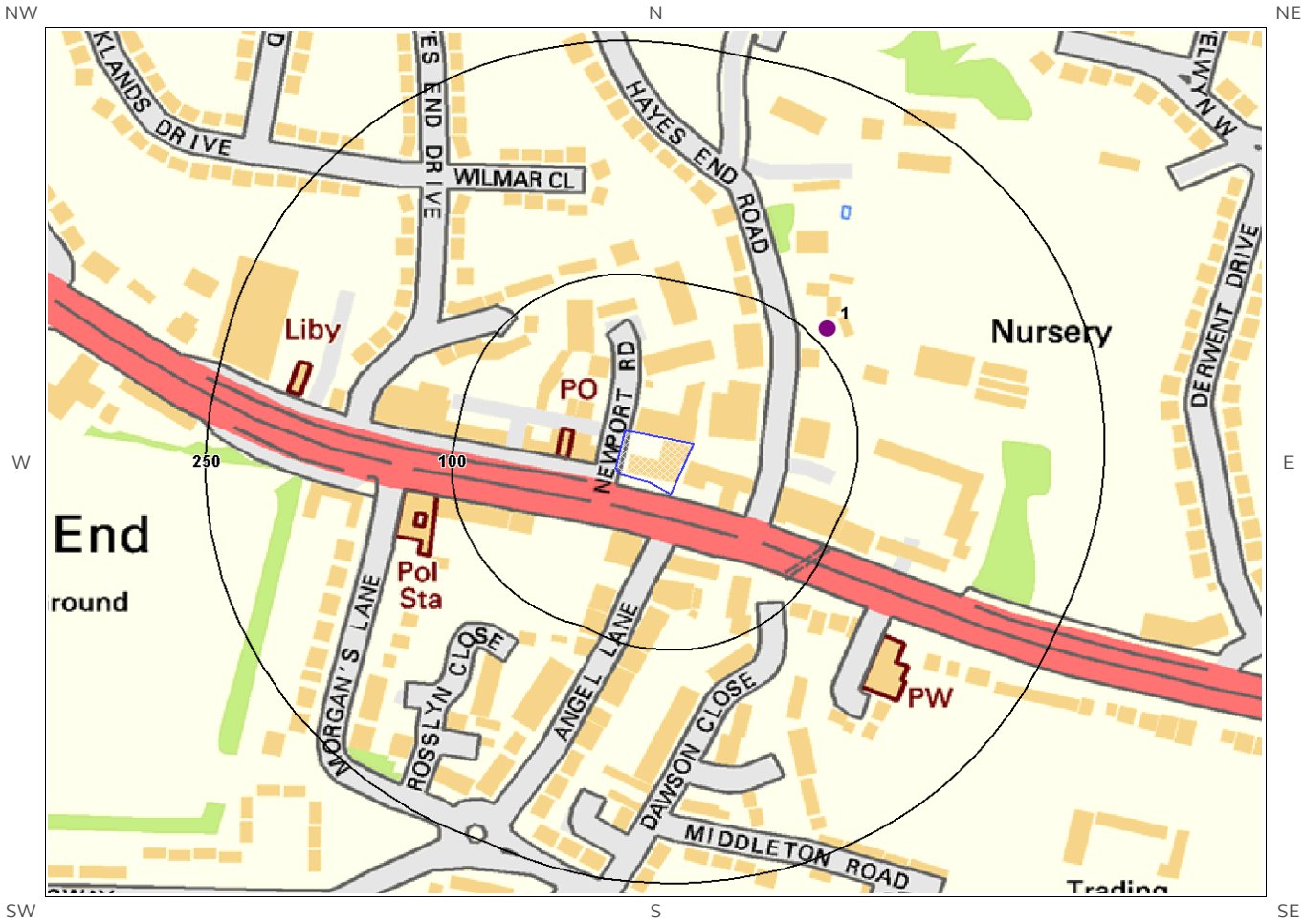
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible 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	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

7 Borehole Records map



Borehole Records Legend

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Site Outline

Borehole Locations

125
250
Search Buffers (m)

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: 1

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	110.0	NE	508910 181970	TQ08SE257	5.0	SPRINGWELL NURSERY, HAYES END

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#1: scans.bgs.ac.uk/sobi_scans/boreholes/576590

8 Estimated Background Soil Chemistry

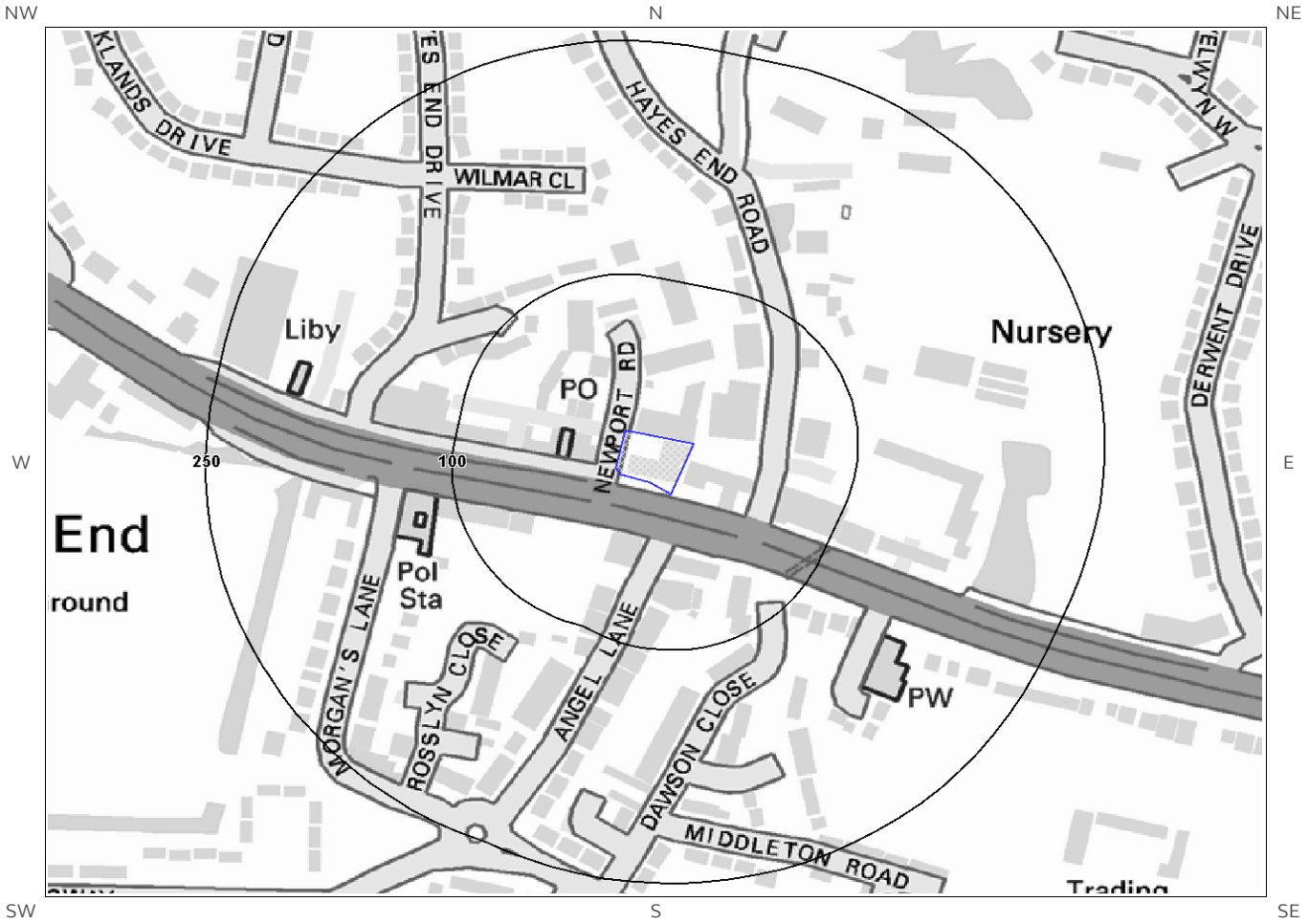
Records of background estimated soil chemistry within 250m of the study site boundary: 1

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.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	London	No data	No data	No data	No data	No data

*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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- Site Outline
- Search Buffers (m) 250 500
- Underground or Partially Underground Railway / Subway System
- Railway Tunnel (OS Mapping)
- Abandoned or Dismantled Railway (OpenStreetMap)
- Railway Track (OS Mapping)
- Railway Track (OpenStreetMap)
- High Speed 2
- High Speed 2 Revised Proposed Route
- Crossrail 1
- Railway and/or Tunnel Feature from Historical Mapping

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?	No
Have any underground railway lines 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.

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?	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.

9.5 Railway Projects

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

Is the study site within 5km of the route of the High Speed 2 rail project?	Yes
Is the study site within 500m of the route of the Crossrail 1 rail project?	No

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

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

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

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Web:**www.bgs.ac.uk**
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www.coal.gov.uk

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https://www.gov.uk/government/organisations/public-health-england
Email: **enquiries@phe.gov.uk**
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https://www.groundsure.com/terms-and-conditions-may25-2018

Jomas Associates Ltd

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

Groundsure Reference:	HMD-377-5203806
Your Reference:	P16081437-1
Report Date	6 Jul 2018
Report Delivery Method:	Email - pdf

Enviro Insight

Address: 1200 UXBRIDGE ROAD, HAYES, UB4 8JD

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

Enc.
Groundsure Enviroinsight

Enviro Insight

Address:	**1200 UXBRIDGE ROAD, HAYES, UB4 8JD**
Date:	**6 Jul 2018**
Reference:	**HMD-377-5203806**
Client:	**Jomas Associates Ltd**

NW N NE



W E

SW S SE

Aerial Photograph Capture date:	07-Jun-2015
Grid Reference:	508805,181886
Site Size:	0.12ha

Report Reference: HMD-377-5203806
Client Reference: P16081437-1

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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	0	3	11	13
1.2 Additional Information – Historical Tank Database	0	0	1	7
1.3 Additional Information – Historical Energy Features Database	0	0	6	13
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	4	1	3	2
1.6 Potentially Infilled Land	0	0	4	16

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	3	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	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	2
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	0	7
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	3

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	8	16	Not searched
4.2 Records of Petrol and Fuel Sites	0	1	0	1
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	2	0	2	17
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	5
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	0	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 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	0	0	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
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	Potential at Surface
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Moderate

Section 8: Designated Environmentally Sensitive Sites

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

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	1	1
8.14 Records of Green Belt land	0	0	1	0	0	11

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	Low
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	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

10.1 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 licenses, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

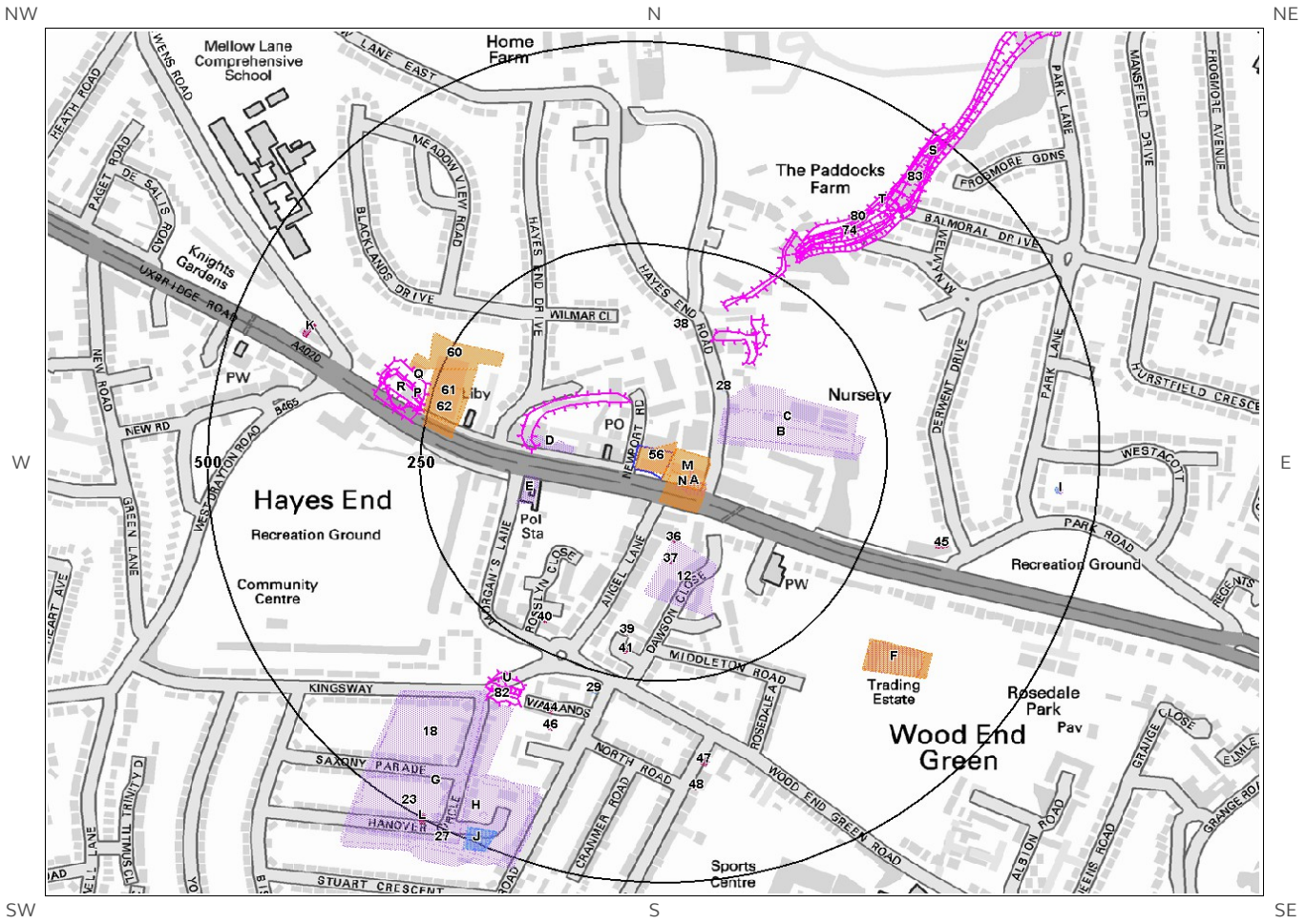
Note: Maps

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

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

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

1. Historical Land Use



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Site Outline

250
500
Search Buffers (m)

Historical 1:10,000 and 1:10,560 scale mapping

Industrial Land Use

Potentially Infilled Land

Historical 1:2,500, 1:1,250 and 1:500 scale mapping

Energy Features

Petrol Stations

Tanks

Garages

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: 27

ID	Distance [m]	Direction	Use	Date
1N	17	SE	Police Station	1938
2A	23	SE	Police Station	1935
3A	25	SE	Police Station	1938
4B	53	E	Nursery	1920
5B	60	E	Nursery	1913
6B	60	E	Nursery	1938
7C	61	E	Nursery	1970
8C	61	E	Nursery	1975
9C	61	E	Nursery	1989
10D	73	W	Police Station	1959
11D	73	W	Police Station	1970
12	74	S	Bakery	1970
13E	111	W	Police Station	1989
14E	111	W	Police Station	1975
15F	316	SE	Unspecified Warehouse	1970
16F	316	SE	Unspecified Works	1989
17F	316	SE	Unspecified Works	1975
18	328	SW	Nursery	1913
19H	330	SW	Nursery	1920
20G	330	SW	Nursery	1932
21G	336	SW	Nursery	1920
22H	414	S	Unspecified Tank	1938
23	444	SW	Nursery	1913
24I	452	E	Unspecified Tank	1913
25H	461	SW	Unspecified Tank	1935
26J	480	SW	Unspecified Tank	1938
27	483	SW	Unspecified Tank	1932

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: 8

ID	Distance (m)	Direction	Use	Date
28	96	NE	Unspecified Tank	1914
29	271	S	Unspecified Tank	1866
30I	449	E	Unspecified Tank	1935
31I	449	E	Unspecified Tank	1914
32J	477	SW	Unspecified Tank	1964
33J	478	SW	Unspecified Tank	1965
34J	479	SW	Unspecified Tank	1940
35J	479	SW	Unspecified Tank	1935

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: 19

ID	Distance (m)	Direction	Use	Date
36	73	S	Electricity Substation	1972
37	101	S	Electricity Substation	1992
38	151	N	Electricity Substation	1992
39	193	S	Electricity Substation	1972
40	214	SW	Electricity Substation	1992
41	216	S	Electricity Substation	1992
42P	264	W	Electricity Substation	1992
43Q	270	W	Electricity Substation	1972
44	313	SW	Electricity Substation	1972
45	327	E	Electricity Substation	1992
46	332	SW	Electricity Substation	1992
47	349	S	Electricity Substation	1972
48	383	S	Electricity Substation	1992
49K	406	W	Electricity Substation	1967
50K	407	W	Electricity Substation	1985
51K	407	W	Electricity Substation	1992
52K	407	W	Electricity Substation	1992
53L	493	SW	Electricity Substation	1996
54L	493	SW	Electricity Substation	

1.4 Additional Information – Historical Petrol and Fuel Site Database

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

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

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
55M	0	On Site	Garage	1972
56	0	On Site	Depot and Destructor Works	1992
57M	0	On Site	Garage	1965
58M	0	SE	Garage	1964
59N	7	SE	Garage	1992
60	189	NW	Garage	1992
61	207	W	Garage	1972
62	214	W	Garage	1992
63F	315	SE	Coach Works	1965
64F	316	SE	Coach Works	1964

1.6 Potentially Infilled Land

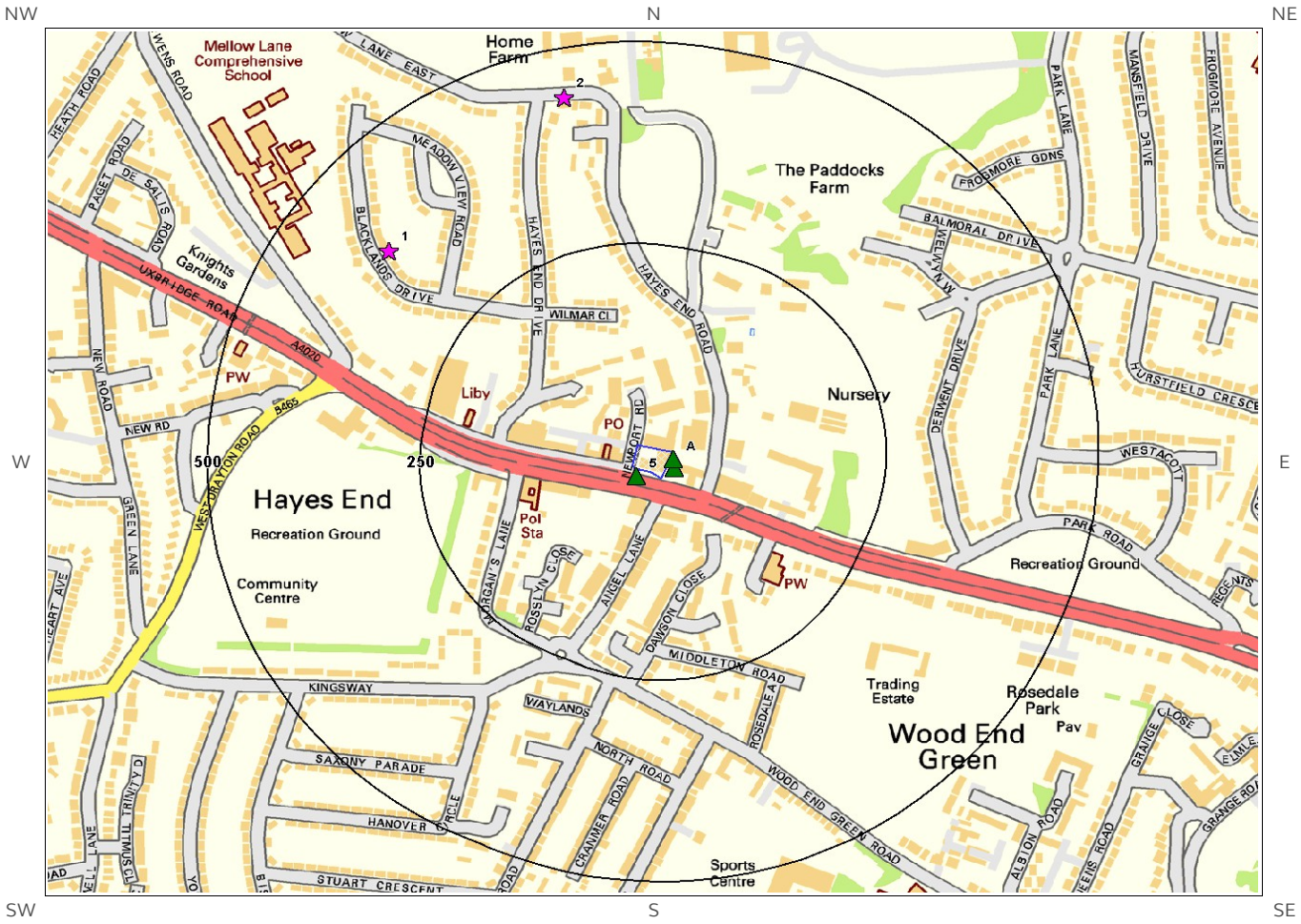
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 20

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

ID	Distance(m)	Direction	Use	Date
65	54	N	Water Body	1865
66O	141	NE	Ponds	1865
67O	161	NE	Pond	1882
68	190	N	Pond	1865
69P	258	W	Pond	1882
70Q	259	W	Pond	1897
71R	260	W	Pond	1894
72R	260	W	Pond	1865
73S	276	NE	Ponds	1920

74	281	NE	Pond	1865
75S	283	NE	Ponds	1959
76T	287	NE	Ponds	1913
77T	287	NE	Ponds	1938
78T	287	NE	Ponds	1894
79U	295	SW	Pond	1882
80	299	NE	Pond	1882
81U	303	SW	Pond	1894
82	315	SW	Pond	1865
83	397	NE	Pond	1865
84S	415	NE	Pond	1882

2. Environmental Permits, Incidents and Registers Map



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- Site Outline
- Search Buffers (m) — 250 / 500
- Recorded Pollution Incident
- Dangerous Substances (List 1)
- Dangerous Substances (List 2)
- Water Industry Referrals
- Licenced Discharge Consents
- Red List Discharge Consents
- RAS 3 & 4 Authorisations
- Part A(1) Authorised Processes and Historic IPC Authorisations
- Part A(2) and Part B Authorised Processes
- COMAH / NIHHS Sites
- Sites Determined as Contaminated Land
- Hazardous Substance Consents and Enforcements

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 and Local Authorities reveal the following information:

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) within 500m of the study site:

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:

0

Database searched and no data found.

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

3

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

ID	Distance (m)	Direction	NGR	Details	
3A	5	SE	508830 181885	Address: Texaco Uxbridge, 1190 Uxbridge Road, Hayes, UB4 8JE Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
4A	10	SE	508830 181874	Address: Texaco Reliance, Harlington Rd Process: Petrol Vapour Recovery Process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
5	12	S	508785 181864	Address: Evans Halshaw, Uxbridge Rd, Borehamwood, Hertfordshire, WD6 1QB Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

0

Database searched and no data found.

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

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:

2

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	379	NW	508494 182146	Incident Date: 02-Oct-2002 Incident Identification: 112222 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
2	439	N	508700 182336	Incident Date: 14-Jun-2002 Incident Identification: 84958 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Vegetable Cuttings and Deposits	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

0

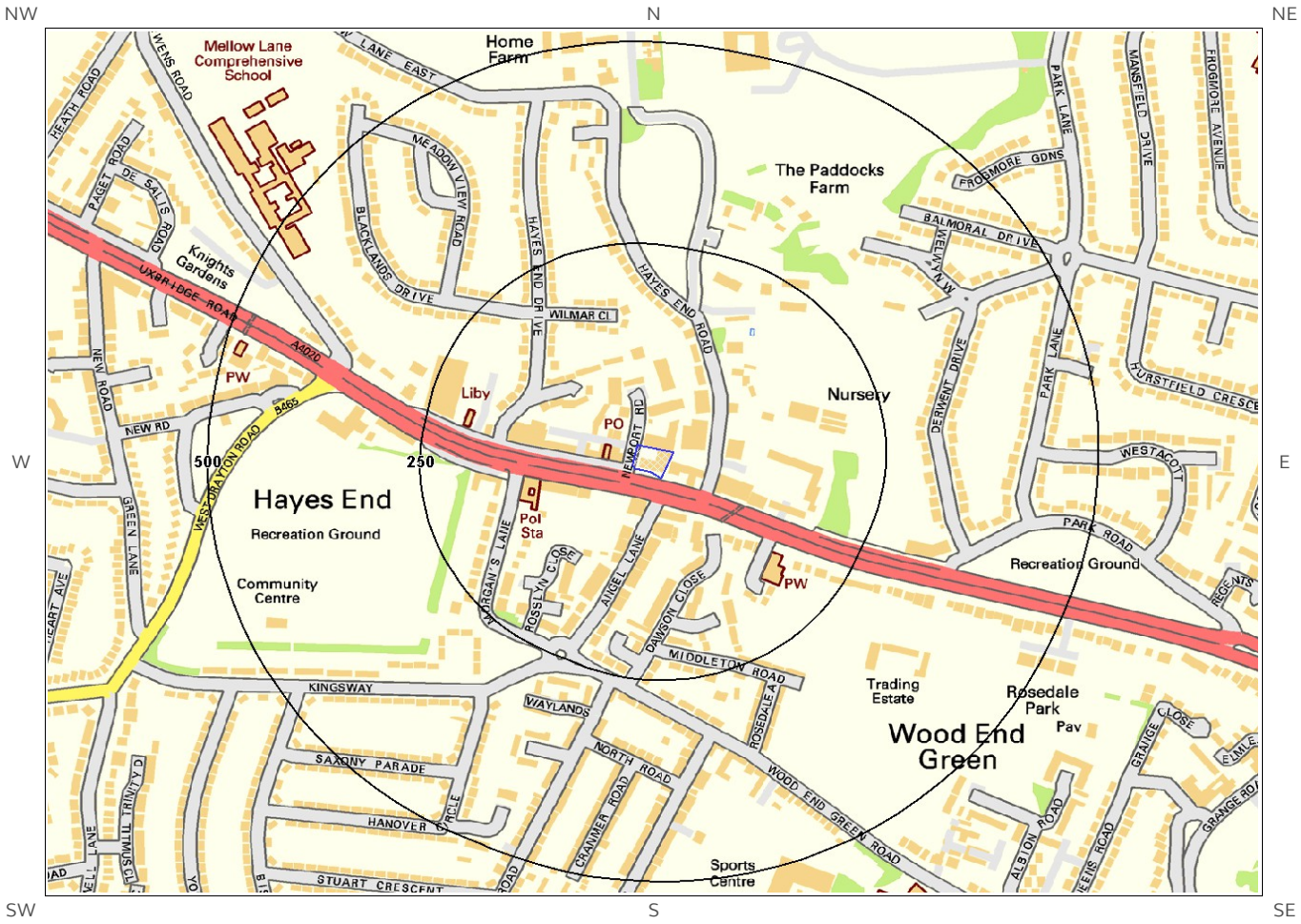
Database searched and no data found.

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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Site Outline

250
500
Search Buffers (m)

EA/NRW Active Landfill

EA/NRW Historic Landfill

BGS / DoE Survey Landfill

Historic and Planned Waste Sites

EA/NRW Licensed Waste Site

Local Authority/Historical Mapping Landfill Records

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 the study 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:

7

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1017	SW		Site Address: Stockley Park East, Stockley Park, Middlesex Waste Licence: Yes Site Reference: 8HI048, DL197, HIL56C Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 02-Apr-1985 Licence Surrendered: 15-Mar-1993 Licence Holder Address: - Operator: - Licence Holder: Stockley Park Consortium Limited First Recorded: 31-Dec-1950 Last Recorded: 31-Oct-1992
Not shown	1179	S		Site Address: Botwell Common Road, Botwell Waste Licence: - Site Reference: 8HI008, HIL008 Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Hayes and Hartlington Urban District Council First Recorded: 31-Dec-1960 Last Recorded: 31-Dec-1964
Not shown	1266	SW		Site Address: Land Parcels 2,3,4,5,9, Stockley Park, Hillingdon, Middlesex Waste Licence: Yes Site Reference: DL410, 8HI066, HIL075 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: TE1/L/STO001	Licence Issue: 13-Oct-1992 Licence Surrendered: 30-Oct-2001 Licence Holder Address: - Operator: - Licence Holder: Stockley Park Consortium Limited First Recorded: 31-Dec-1940 Last Recorded: -

ID	Distance (m)	Direction	NGR	Details	
Not shown	1339	S		Site Address: Land Parcels 2,3,4,5,9, Stockley Park, Hillingdon, Middlesex Waste Licence: Yes Site Reference: DL410, 8HI066, HIL075 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: TE1/L/STO001	Licence Issue: 25-Oct-1990 Licence Surrendered: 30-Oct-2001 Licence Holder Address: Stockley Park Project Office, Bolingbroke Way, Hayes, Middlesex Operator: - Licence Holder: Stockley Park Consortium Limited First Recorded: 31-Dec-1940 Last Recorded: -
Not shown	1374	SW		Site Address: Area to north of Stockley Park, Stockley Park, Middlesex Waste Licence: - Site Reference: 8HI079 Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Yiewsley and West Drayton Council First Recorded: - Last Recorded: -
Not shown	1405	SW		Site Address: North East Link Spur Road, Stockley Park, Hillingdon, London Waste Licence: Yes Site Reference: DL470, 8HI068, HIL075 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 20-Jul-1993 Licence Surrendered: 25-Apr-1994 Licence Holder Address: - Operator: - Licence Holder: London Borough of Hillingdon First Recorded: 31-Dec-1993 Last Recorded: 30-Apr-1994
Not shown	1460	SW		Site Address: North East Link Spur Road, Stockley Park, Hillingdon, London Waste Licence: Yes Site Reference: DL470, 8HI068, HIL075 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 20-Jul-1993 Licence Surrendered: 25-Apr-1994 Licence Holder Address: - Operator: - Licence Holder: London Borough of Hillingdon First Recorded: 31-Dec-1993 Last Recorded: 30-Apr-1994

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:

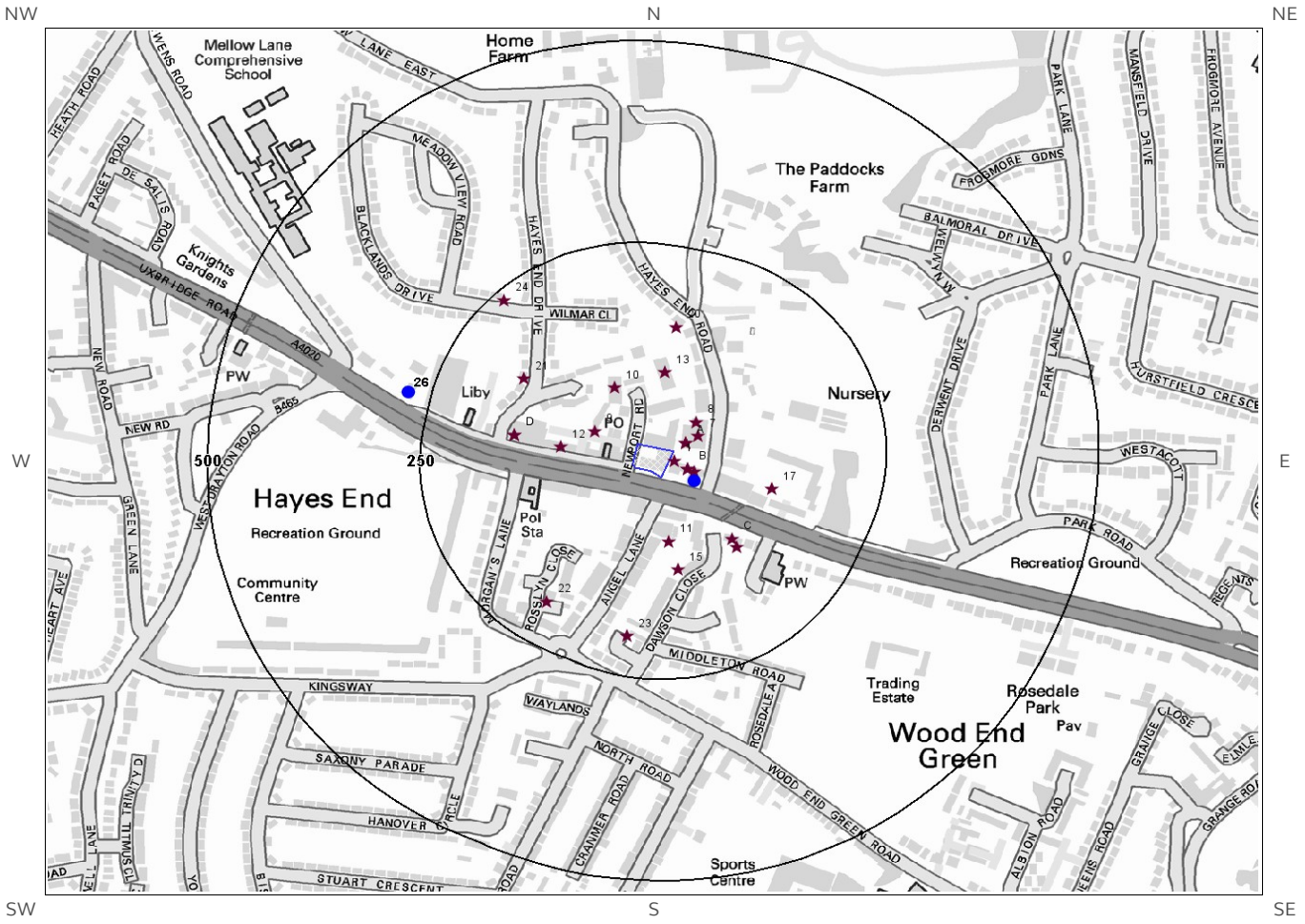
3

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1360	N	509059 183238	Site Address: P G Allen, Allens Yard, 143, Charville Lane, Hayes, Middlesex, UB4 8PD Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ALL001 EPR reference: EA/EPR/RP3196NH/A001 Operator: P G Allen Waste Management licence No: 80080 Annual Tonnage: 1820.0	Issue Date: 20/07/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Allens Yard, Hayes Correspondence Address: -
Not shown	1407	SW	507776 180895	Site Address: Land Parcels 2-5 & 9, Stockley Park, Hillingdon, Middlesex Type: Landfill taking other wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STO001 EPR reference: EA/EPR/AP3596NB/S002 Operator: Stockley Park Consortium Ltd Waste Management licence No: 80065 Annual Tonnage: 100000.0	Issue Date: 25/10/1990 Effective Date: - Modified: - Surrendered Date: 30/10/2001 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Stockley Park, Hillingdon Correspondence Address: -
Not shown	1407	SW	507776 180895	Site Address: Land Parcels 2-5 & 9, Stockley Park, Hillingdon, Middlesex Type: Landfill taking other wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STO000 EPR reference: - Operator: Stockley Park Consortium Ltd Waste Management licence No: 80065 Annual Tonnage: 0.0	Issue Date: 25/10/1990 Effective Date: - Modified: - Surrendered Date: 30/10/2001 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Stockley Park, Hillingdon Correspondence Address: Stockley Park Consortium Ltd, Stockley Park Project Office, Bolingbroke Way, Hayes, Middx, UB3 1EP

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4. Current Land Use Map



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Site Outline

Search Buffers (m)
250
500

Current Industrial Sites

Petrol & Fuel Sites

Electricity Transmission Cables

Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 24

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	5	SE	Q H C Ltd	508829 181885	1190, Uxbridge Road, Hayes, UB4 8JB	Vehicle Hire and Rental	Hire Services
2A	18	NE	Brandon Lifting Equipment Hire	508843 181907	Hayes End Road, Hayes, UB4 8EH	Lifting and Handling Equipment	Industrial Products
3A	18	NE	Brandon Hire	508843 181907	Hayes End Road, Hayes, UB4 8EH	Construction and Tool Hire	Hire Services
4B	23	SE	Quality Tyres Auto Services	508845 181875	Uxbridge Road, Hayes, UB4 8JE	Vehicle Parts and Accessories	Motoring
5B	23	SE	Hadley Motors	508845 181875	Unit 1 1190, Uxbridge Road, Hayes, UB4 8JB	New Vehicles	Motoring
6B	32	SE	Hayes End Service Station	508853 181872	Hayes End, Hayes, Middlesex, UB4 8JE	Petrol and Fuel Stations	Road and Rail
7	34	NE	Warehouse	508857 181916	UB4	Container and Storage	Transport, Storage and Delivery
8	45	NE	Mangajo	508855 181932	Home Farm, Hayes End Road, Hayes, UB4 8EN	Distribution and Haulage	Transport, Storage and Delivery
9	54	W	Draypark Motors	508736 181922	Rear of 1278, Uxbridge Road, Hayes, UB4 8JF	Vehicle Repair, Testing and Servicing	Repair and Servicing
10	76	N	Factory	508760 181976	UB4	Unspecified Works Or Factories	Industrial Features
11	79	S	Electricity Sub Station	508823 181785	UB3	Electrical Features	Infrastructure and Facilities
12	88	W	Stuart T V & Electricals	508696 181902	1294, Uxbridge Road, Hayes, UB4 8JG	Electrical Equipment Repair and Servicing	Repair and Servicing
13	94	N	Warehouse	508818 181995	UB4	Container and Storage	Transport, Storage and Delivery
14C	112	SE	Hopespare	508897 181788	645, Uxbridge Road, Hayes, UB4 8HS	Hydraulic Engineers	Engineering Services
15	115	S	Cargo to Kenya	508834 181750	36, Dawson Close, Hayes, UB3 2RH	Distribution and Haulage	Transport, Storage and Delivery
16C	122	SE	Cottage Cars	508902 181778	641, Uxbridge Road, Hayes, UB4 8HS	Secondhand Vehicles	Motoring
17	124	E	Electricity Sub Station	508944 181850	UB4	Electrical Features	Infrastructure and Facilities
18D	145	W	Dream Beds	508641 181917	1330, Uxbridge Road, Hayes, UB4 8JG	Beds and Bedding	Consumer Products

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
19D	145	W	Discount Beds	508641 181917	1330, Uxbridge Road, Hayes, UB4 8JG	Beds and Bedding	Consumer Products
20	152	N	Electricity Sub Station	508832 182051	UB4	Electrical Features	Infrastructure and Facilities
21	157	NW	London Airport Transport Ltd	508653 181987	13, Hayes End Drive, Hayes, UB4 8HB	Airlines and Airline Services	Transport, Storage and Delivery
22	196	SW	Electricity Sub Station	508679 181711	UB3	Electrical Features	Infrastructure and Facilities
23	200	S	Electricity Sub Station	508774 181668	UB3	Electrical Features	Infrastructure and Facilities
24	238	NW	Electricity Sub Station	508630 182084	UB4	Electrical Features	Infrastructure and Facilities

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)	Direction	NGR	Company	Address	LPG	Status
25B	37	SE	508853 181859	Texaco	Hayes End Service Station, 1364, Uxbridge Road, Uxbridge Road, Hayes End Road, Hayes End, Hayes, Outer London, UB4 8JE	No	Closed
26	278	W	508517 181970	Obsolete	Uxbridge Service Station, 1368, Uxbridge Road, Uxbridge Road, Hayes End, Hayes, Outer London, UB4 8JB	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: 0

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: 0

Database searched and no data found.

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

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

Lex Code	Description	Rock Type
BHT-XSV	BOYN HILL GRAVEL MEMBER	SAND AND GRAVEL

5.3 Bedrock and Solid Geology

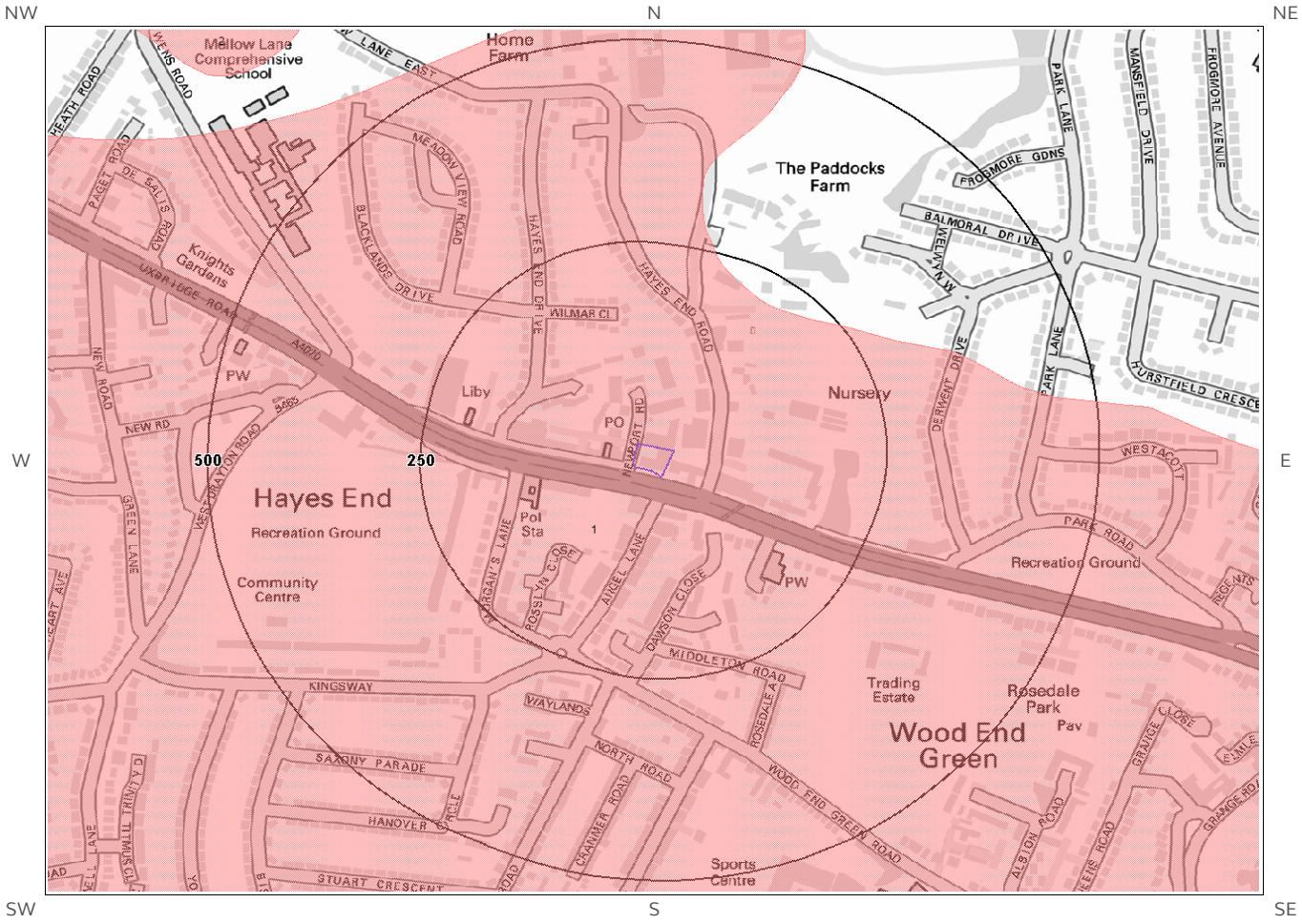
The database has been searched on site, including a 50m buffer.

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

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

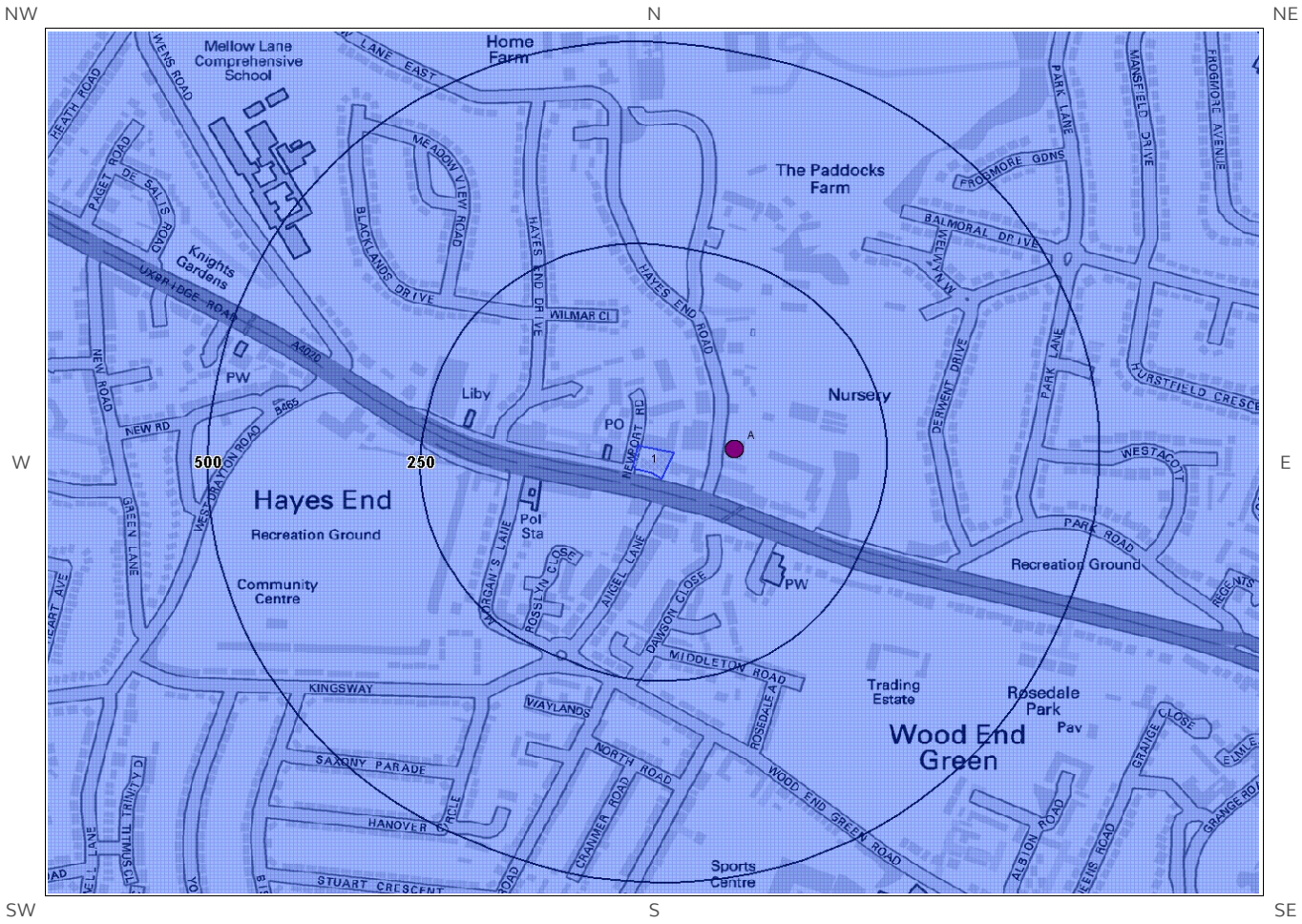
6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



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6b. Aquifer Within Bedrock Geology and Abstraction Licenses



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Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

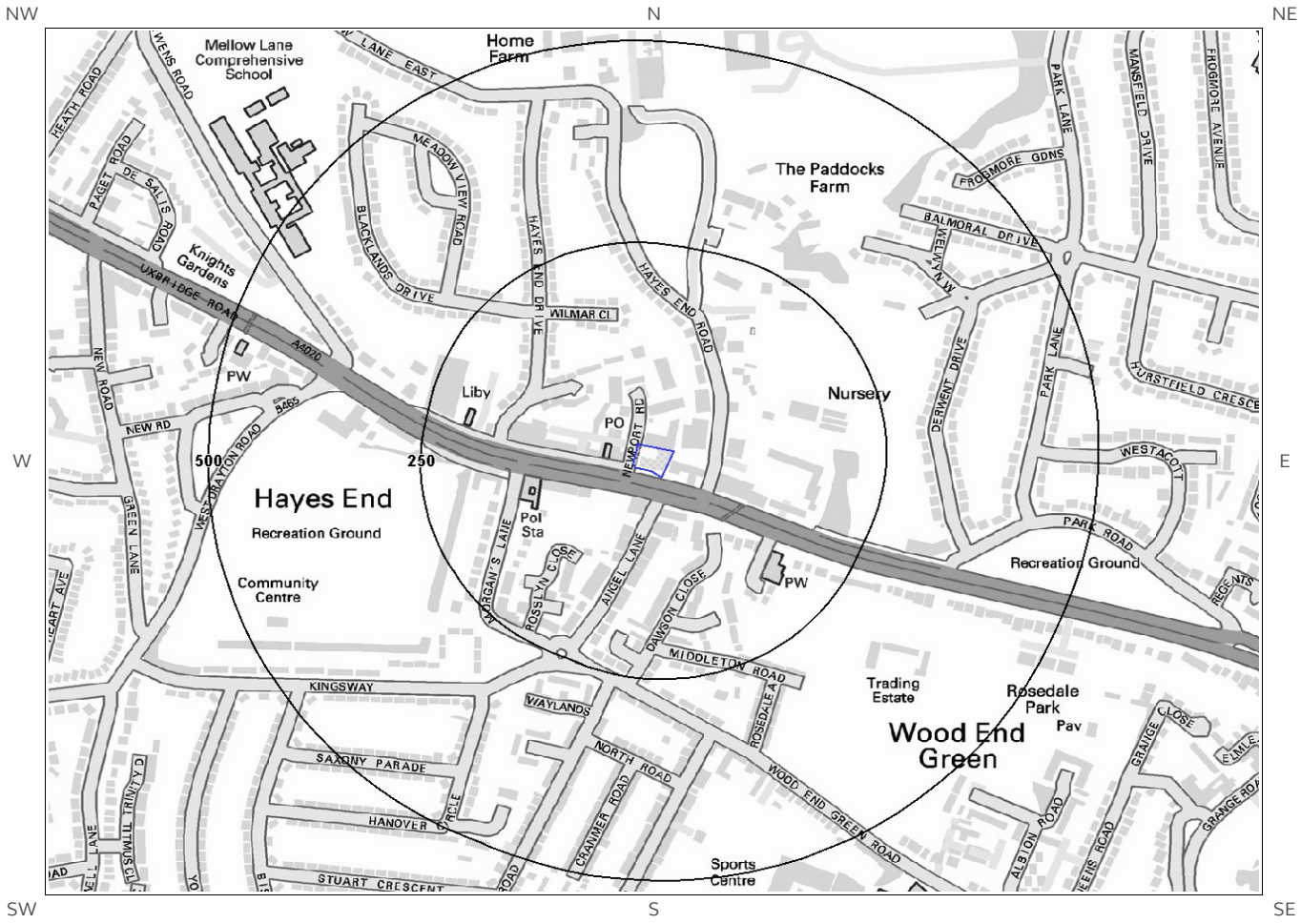
Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

Surface Water Abstraction Licence

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



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Site Outline

250
500
Search Buffers (m)

Source Protection Zone 1 - Inner Catchment

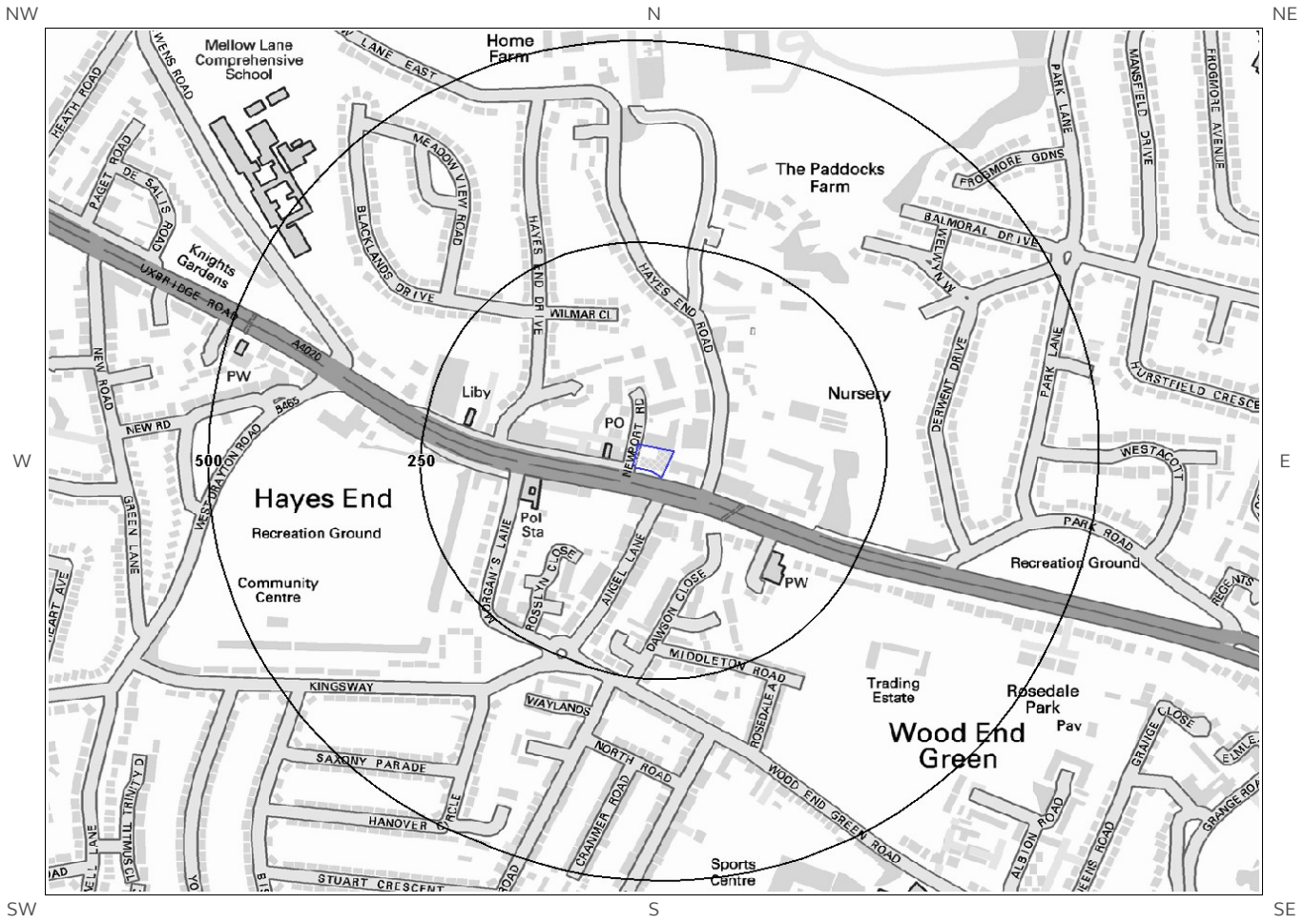
Source Protection Zone 2 - Outer Catchment

Source Protection Zone 3 - Total Catchment

Source Protection Zone 4 - Zone of Special Interest

Potable Water Abstraction Licence

6d. Hydrogeology – Source Protection Zones within confined aquifer



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Source Protection Zone 1 - Inner Catchment

Source Protection Zone 2C - Outer Catchment within Confined Aquifer

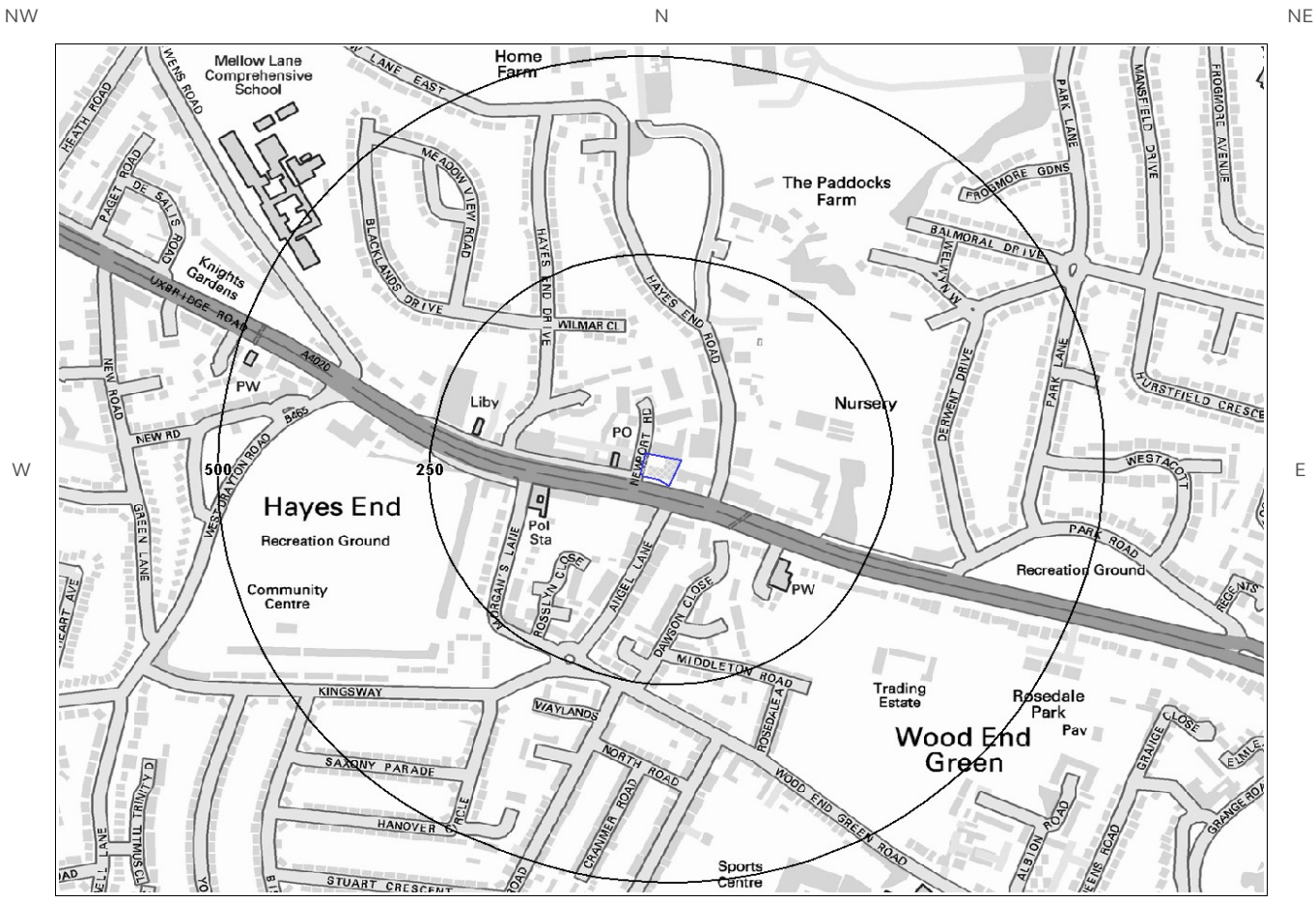
Source Protection Zone 3C - Total Catchment within Confined Aquifer

Potable Water Abstraction Licence

Site Outline

250
500
Search Buffers (m)

6e. Hydrology – Watercourse Network and River Quality



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Site Outline

250
500
Search Buffers (m)

Tidal River
Inland River
Underground or Elevated Tidal River
Underground or Elevated Inland River
Foreshore
General Quality Assessment: Chemistry

Canal
Underground or Elevated Canal
Lock or Flight of Locks
Lake, Reservoir, or Marsh
Drain or Transfer
General Quality Assessment: Biology

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	Distance (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

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

6.3 Groundwater Abstraction Licences

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	
2A	71	E	508900 181900	Status: Historical Licence No: 28/39/36/0015 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Two Wells At Springwell Nursery, Hayes End Road, Hayes Data Type: Point Name: GOODSON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 11/7/1966 Expiry Date: - Issue No: 100 Version Start Date: 12/6/1997 Version End Date:
3A	71	E	508900 181900	Status: Historical Licence No: 28/39/36/0015 Details: Spray Irrigation - Spray Irrigation Definition Order Direct Source: Thames Groundwater Point: Two Wells At Springwell Nursery, Hayes End Road, Hayes Data Type: Point Name: GOODSON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 11/7/1966 Expiry Date: - Issue No: 100 Version Start Date: 12/6/1997 Version End Date:
Not shown	998	W	507800 181700	Status: Historical Licence No: 28/39/28/0277 Details: Spray Irrigation - Spray Irrigation Definition Order Direct Source: Thames Groundwater Point: Well At Little London Nursery, Harlington Road, Hillingdon Data Type: Point Name: BARWICK	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 13/2/1967 Expiry Date: - Issue No: 100 Version Start Date: 25/9/1996 Version End Date:
Not shown	998	W	507800 181700	Status: Historical Licence No: 28/39/28/0277 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Well At Little London Nursery, Harlington Road, Hillingdon Data Type: Point Name: BARWICK	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 13/2/1967 Expiry Date: - Issue No: 100 Version Start Date: 25/9/1996 Version End Date:
Not shown	1047	W	507817 182299	Status: Active Licence No: 28/39/28/0008 Details: Laundry Use Direct Source: Thames Groundwater Point: Borehole At Whitelys Parade Data Type: Point Name: BLUE DRAGON (HILLINGDON) LTD	Annual Volume (m^3): 47663 Max Daily Volume (m^3): 200 Original Application No: NPS/WR/014518 Original Start Date: 8/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 7/2/2014 Version End Date:
Not shown	1063	W	507800 182300	Status: Historical Licence No: 28/39/28/0008 Details: Laundry Use Direct Source: Thames Groundwater Point: Borehole At Whitelys Parade Data Type: Point Name: BLUE DRAGON (HILLINGDON) LTD	Annual Volume (m^3): 37669 Max Daily Volume (m^3): 181.84 Original Application No: - Original Start Date: 8/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 8/11/1965 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1701	S	508340 180230	Status: Historical Licence No: 28/39/36/0065 Details: Make-Up or Top Up Water Direct Source: Thames Groundwater Point: Borehole At Stockley Park Data Type: Point Name: STOCKLEY PARK MANAGEMENT LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 25/10/2000 Expiry Date: 31/12/2009 Issue No: 2 Version Start Date: 25/9/2002 Version End Date:
Not shown	1701	S	508340 180230	Status: Historical Licence No: 28/39/36/0065 Details: Make-Up Or Top Up Water Direct Source: Thames Groundwater Point: Stockley Park, Uxbridge- Borehole A Data Type: Point Name: STOCKLEY PARK MANAGEMENT LTD	Annual Volume (m^3): 50005 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 25/10/2000 Expiry Date: 31/12/2009 Issue No: 3 Version Start Date: 14/4/2003 Version End Date:
Not shown	1701	S	508340 180230	Status: Active Licence No: TH/039/0036/003 Details: Spray Irrigation - Storage Direct Source: Thames Groundwater Point: Stockley Park, Uxbridge, Borehole A Data Type: Point Name: Stockley Park Estates Company Limited	Annual Volume (m^3): 50005 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/022577 Original Start Date: 2/2/2010 Expiry Date: 31/3/2019 Issue No: 2 Version Start Date: 15/7/2016 Version End Date:
Not shown	1701	S	508340 180230	Status: Historical Licence No: 28/39/36/0065 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Stockley Park, Uxbridge- Borehole A Data Type: Point Name: STOCKLEY PARK MANAGEMENT LTD	Annual Volume (m^3): 50005 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 25/10/2000 Expiry Date: 31/12/2009 Issue No: 3 Version Start Date: 14/4/2003 Version End Date:
Not shown	1701	S	508340 180230	Status: Historical Licence No: 28/39/36/0065 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Borehole At Stockley Park Data Type: Point Name: STOCKLEY PARK MANAGEMENT LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 25/10/2000 Expiry Date: 31/12/2009 Issue No: 2 Version Start Date: 25/9/2002 Version End Date:
Not shown	1853	W	506950 182160	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole A At Hillingdon Hospital, Hillingdon Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 1/4/2005 Version End Date:
Not shown	1853	W	506950 182160	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Hillingdon Hospital - Borehole Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 138166 Max Daily Volume (m^3): 385.4 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 103 Version Start Date: 31/10/2006 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1872	W	506910 181930	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole B At Hillingdon Hospital, Hillingdon Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 1/4/2005 Version End Date:
Not shown	1872	W	506910 181930	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Hillingdon Hospital- Borehole Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 138166 Max Daily Volume (m^3): 385.4 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 103 Version Start Date: 31/10/2006 Version End Date:
Not shown	1898	SW	507580 180410	Status: Historical Licence No: 28/39/36/0066 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Borehole At Stockley Park Golf Limited Data Type: Point Name: STOCKLEY PARK GOLF LIMITED	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: WRA/N/1152 Original Start Date: - Expiry Date: 31/12/2009 Issue No: 1 Version Start Date: 11/1/2001 Version End Date:
Not shown	1898	SW	507580 180410	Status: Active Licence No: TH/039/0036/012 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Stockley Park , Uxbridge (borehole) Data Type: Point Name: Stockley Park Golf Club Limited	Annual Volume (m^3): 78000 Max Daily Volume (m^3): 2182 Original Application No: NPS/WR/009158 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 1/4/2013 Version End Date:
Not shown	1898	SW	507580 180410	Status: Active Licence No: TH/039/0036/012 Details: General Washing/Process Washing Direct Source: Thames Groundwater Point: Stockley Park , Uxbridge (borehole) Data Type: Point Name: Stockley Park Golf Club Limited	Annual Volume (m^3): 78000 Max Daily Volume (m^3): 2182 Original Application No: NPS/WR/009158 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 1/4/2013 Version End Date:
Not shown	1898	SW	507580 180410	Status: Historical Licence No: 28/39/36/0069 Details: General Washing/Process Washing Direct Source: Thames Groundwater Point: Stockley Park , Uxbridge (borehole) Data Type: Point Name: STOCKLEY PARK GOLF LIMITED	Annual Volume (m^3): 78000 Max Daily Volume (m^3): 2182 Original Application No: WRA/N/1152 Original Start Date: 5/11/2001 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 5/11/2001 Version End Date:
Not shown	1898	SW	507580 180410	Status: Historical Licence No: 28/39/36/0069 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Stockley Park , Uxbridge (borehole) Data Type: Point Name: STOCKLEY PARK GOLF LIMITED	Annual Volume (m^3): 78000 Max Daily Volume (m^3): 2182 Original Application No: WRA/N/1152 Original Start Date: 5/11/2001 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 5/11/2001 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1984	W	506820 182180	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole C At Hillingdon Hospital, Hillingdon Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 1/4/2005 Version End Date:

6.4 Surface Water Abstraction Licences

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

Database searched and no data found.

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site — Identified

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1853	W	506950 182160	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole A At Hillingdon Hospital, Hillingdon Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:
Not shown	1853	W	506950 182160	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Hillingdon Hospital - Borehole Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 138166 Max Daily Volume (m^3): 385.4 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 103 Version Start Date: Version End Date:
Not shown	1872	W	506910 181930	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole B At Hillingdon Hospital, Hillingdon Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1872	W	506910 181930	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Hillingdon Hospital- Borehole Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 138166 Max Daily Volume (m^3): 385.4 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 103 Version Start Date: Version End Date:
Not shown	1984	W	506820 182180	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Borehole C At Hillingdon Hospital, Hillingdon Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 5/10/1992 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:

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	Major 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.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river 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

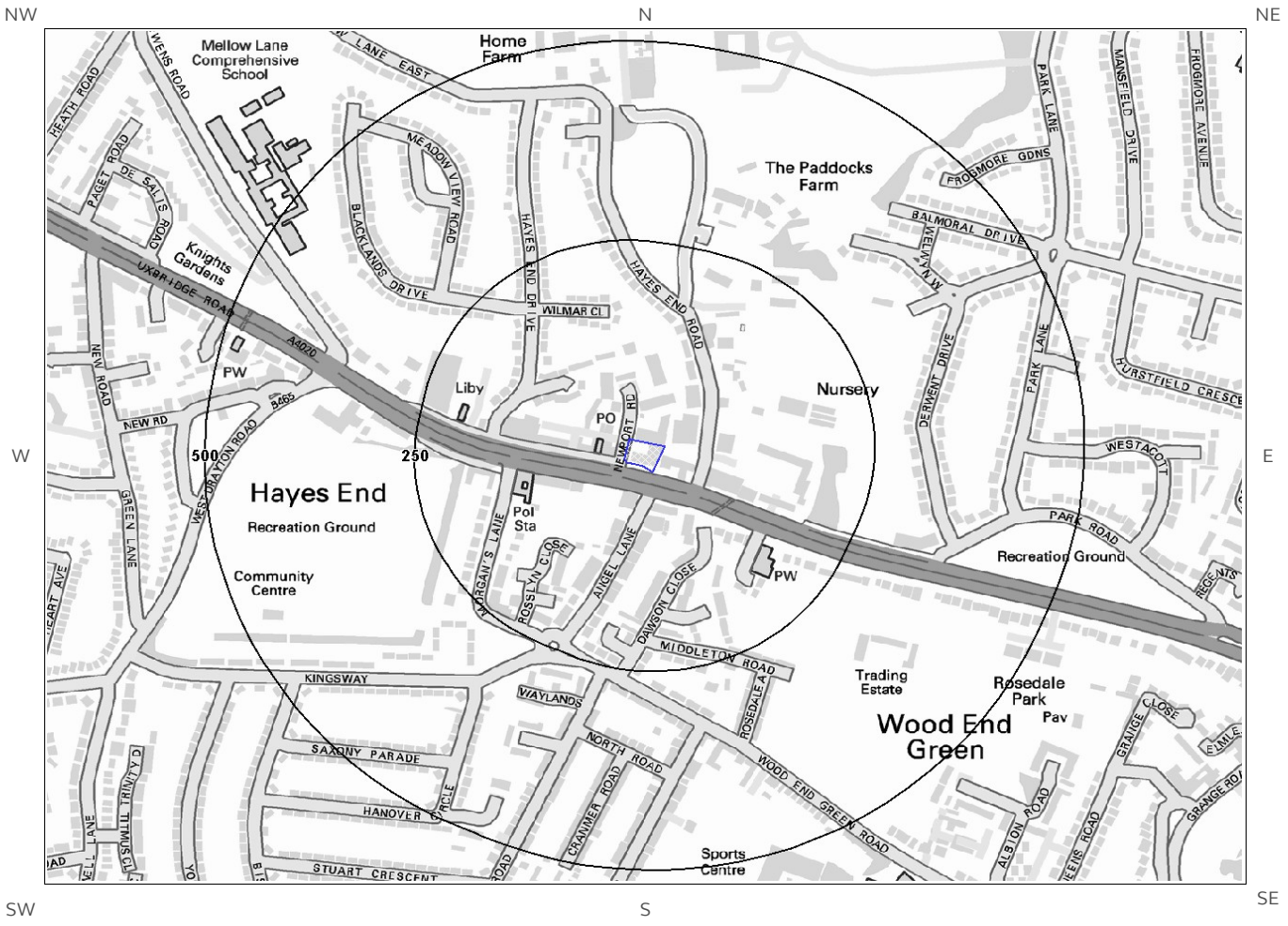
Database searched and no data found.

6.11 Surface Water Features

Surface water features within 250m of the study site — None identified

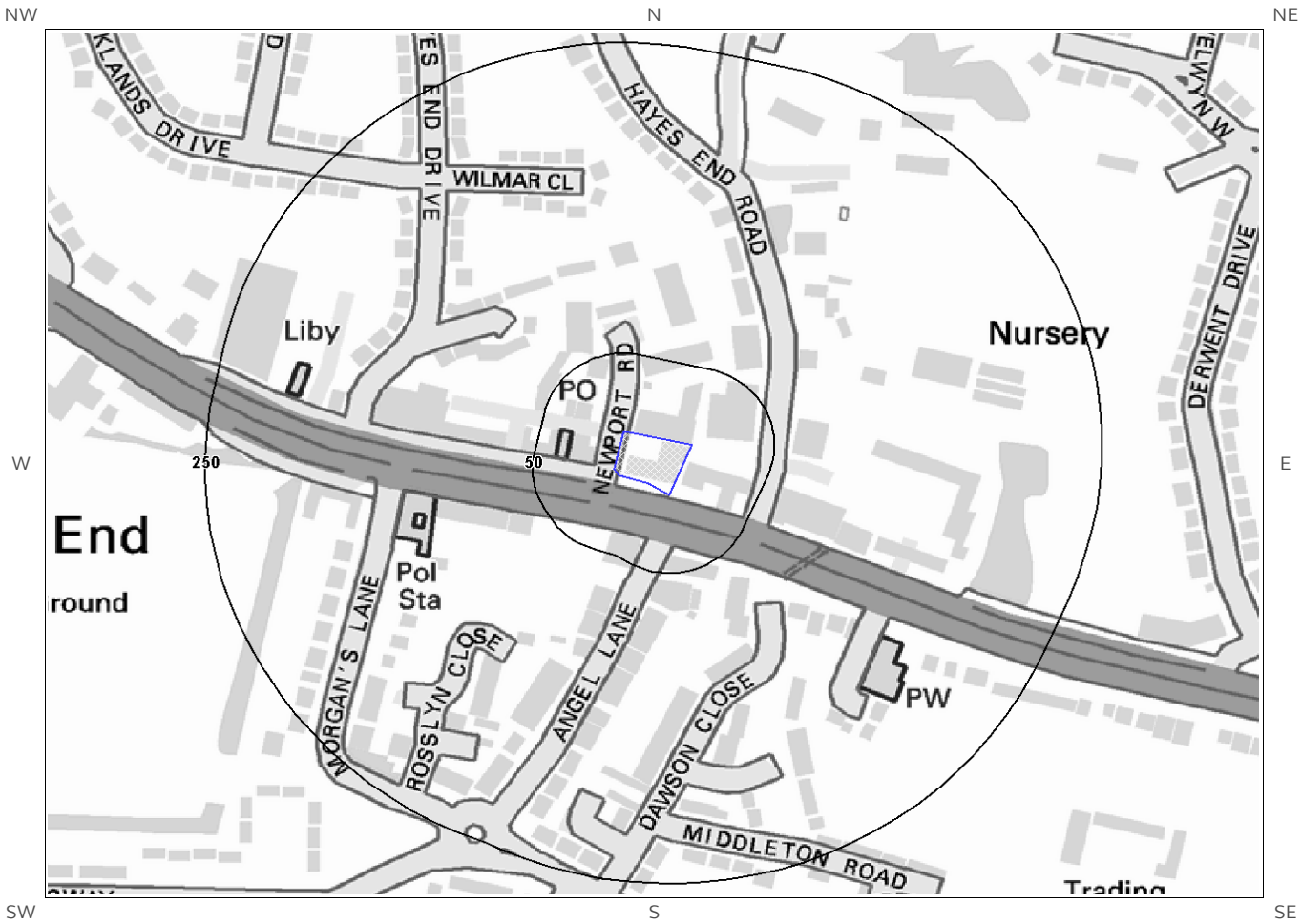
Database searched and no data found.

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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Site Outline

100
250
Search Buffers (m)

RoFRaS Rating

Very Low

Low

Medium

High

7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m — None 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:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m — None 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.

Database searched and no data found.

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	Identified
Clearwater Flooding or Superficial Deposits Flooding	Superficial Deposits 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

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

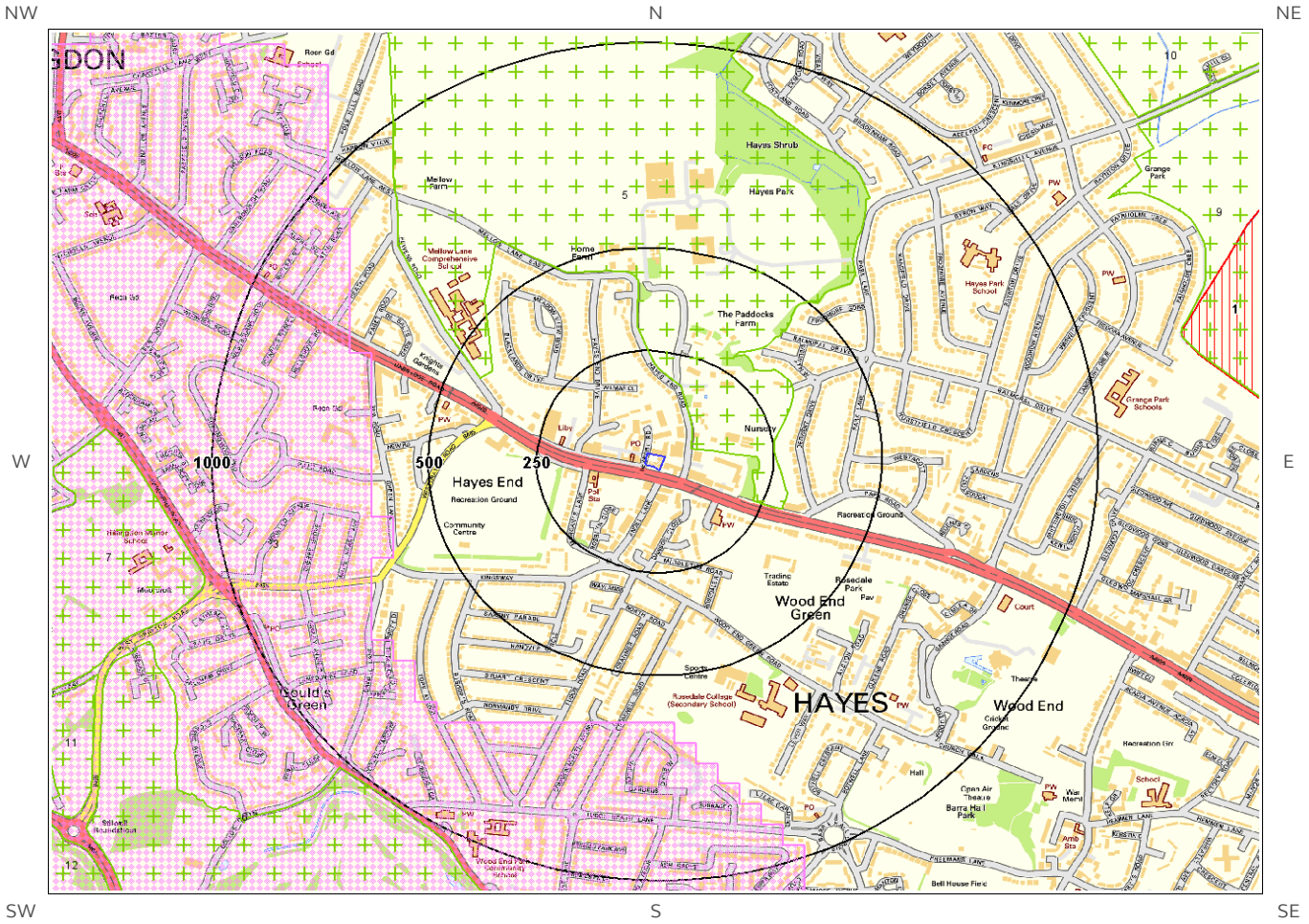
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result	Moderate

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



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Site Outline

100 / 250 Search Buffers (m)

- AONB
- Green Belt
- Ancient Woodland
- National Park
- Environmentally Sensitive Areas
- National Nature Reserve
- SSSI
- Special Areas of Conservation
- Local Nature Reserves
- Special Protection Areas
- World Heritage Sites
- Ramsar Sites
- Nitrate Vulnerable Zones
- Nitrate Sensitive Areas

8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site	Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

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:

0

Database searched and no data found.

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

2

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
1	1230	E	Yeading Meadows (mapped boundary not verified)	Natural England
Not shown	1626	NE	Yeading Brook Meadows (mapped boundary not verified)	Natural England

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

0

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:

2

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
3	596	W	Existing	DEFRA
Not shown	1864	S	Existing	DEFRA

8.14 Records of Green Belt land within 2000m of the study site:

12

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ID	Distance	Direction	Green Belt Name	Local Authority Name
5	63	E	London Area Greenbelt	Hillingdon London Boro
6	1009	SW	London Area Greenbelt	Hillingdon London Boro
7	1053	W	London Area Greenbelt	Hillingdon London Boro
Not shown	1174	S	London Area Greenbelt	Hillingdon London Boro
9	1202	NE	London Area Greenbelt	Hillingdon London Boro
10	1231	NW	London Area Greenbelt	Hillingdon London Boro
11	1365	W	London Area Greenbelt	Hillingdon London Boro
12	1596	SW	London Area Greenbelt	Hillingdon London Boro
Not shown	1628	NE	London Area Greenbelt	Ealing London Boro
Not shown	1720	W	London Area Greenbelt	Hillingdon London Boro
Not shown	1947	W	London Area Greenbelt	Hillingdon London Boro
Not shown	1960	SW	London Area Greenbelt	Hillingdon London Boro

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 — Low

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

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

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 — Very Low

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

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

* 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 — None identified
Guidance: No Guidance Required.

Contact Details

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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**

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Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey
Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority
Authority: London Borough of Hillingdon
Phone: 01895 250 111
Web: http://www.hillingdon.gov.uk/
Address: Civic Centre, High Street, Uxbridge, Middlesex, UB8 1UW

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

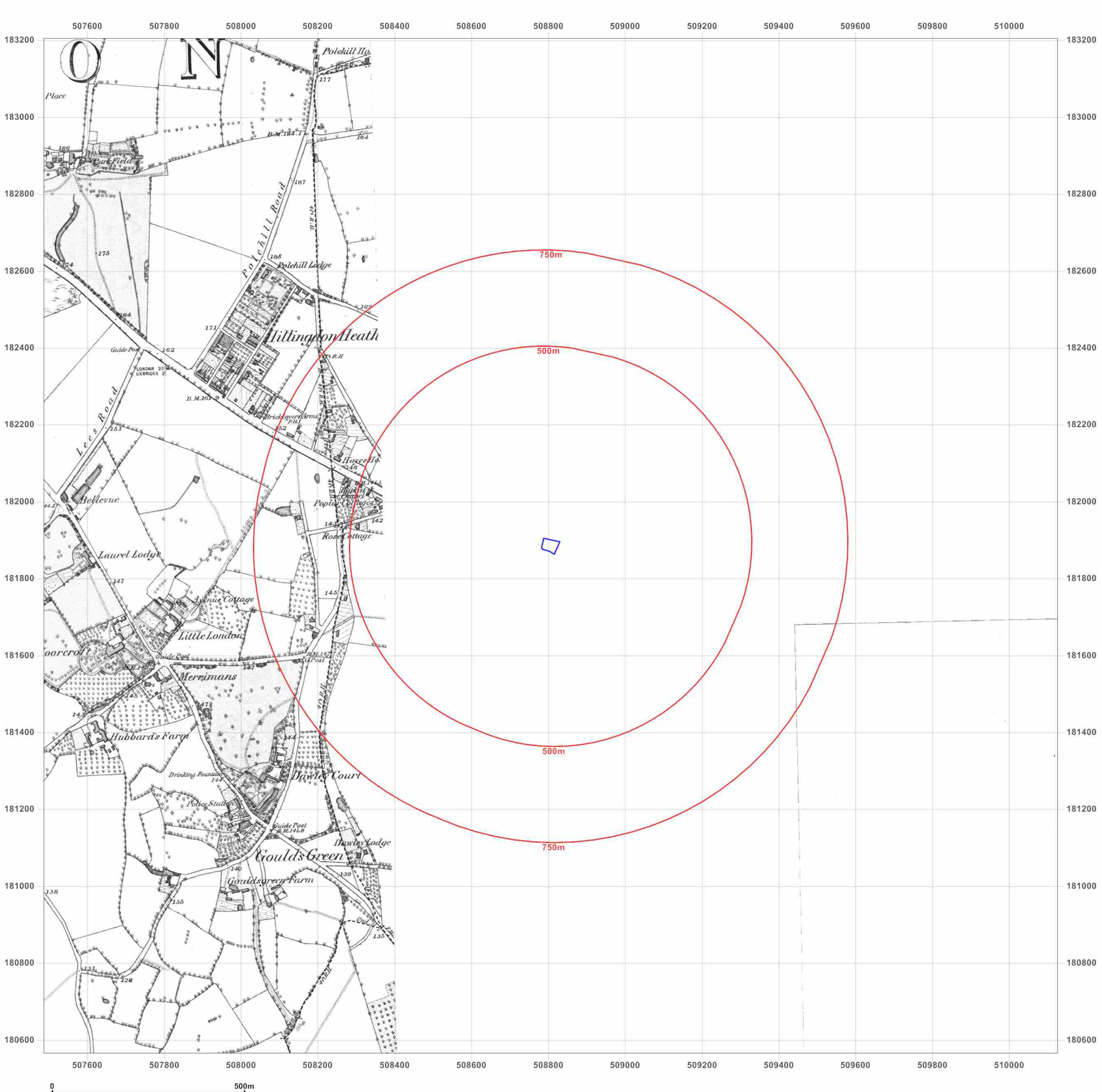
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APPENDIX 3 – OS HISTORICAL MAPS



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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

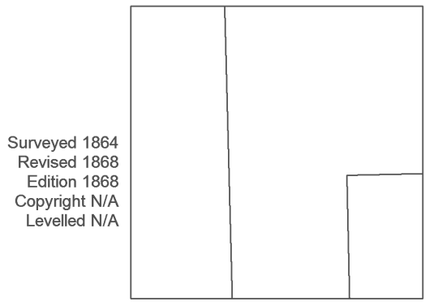
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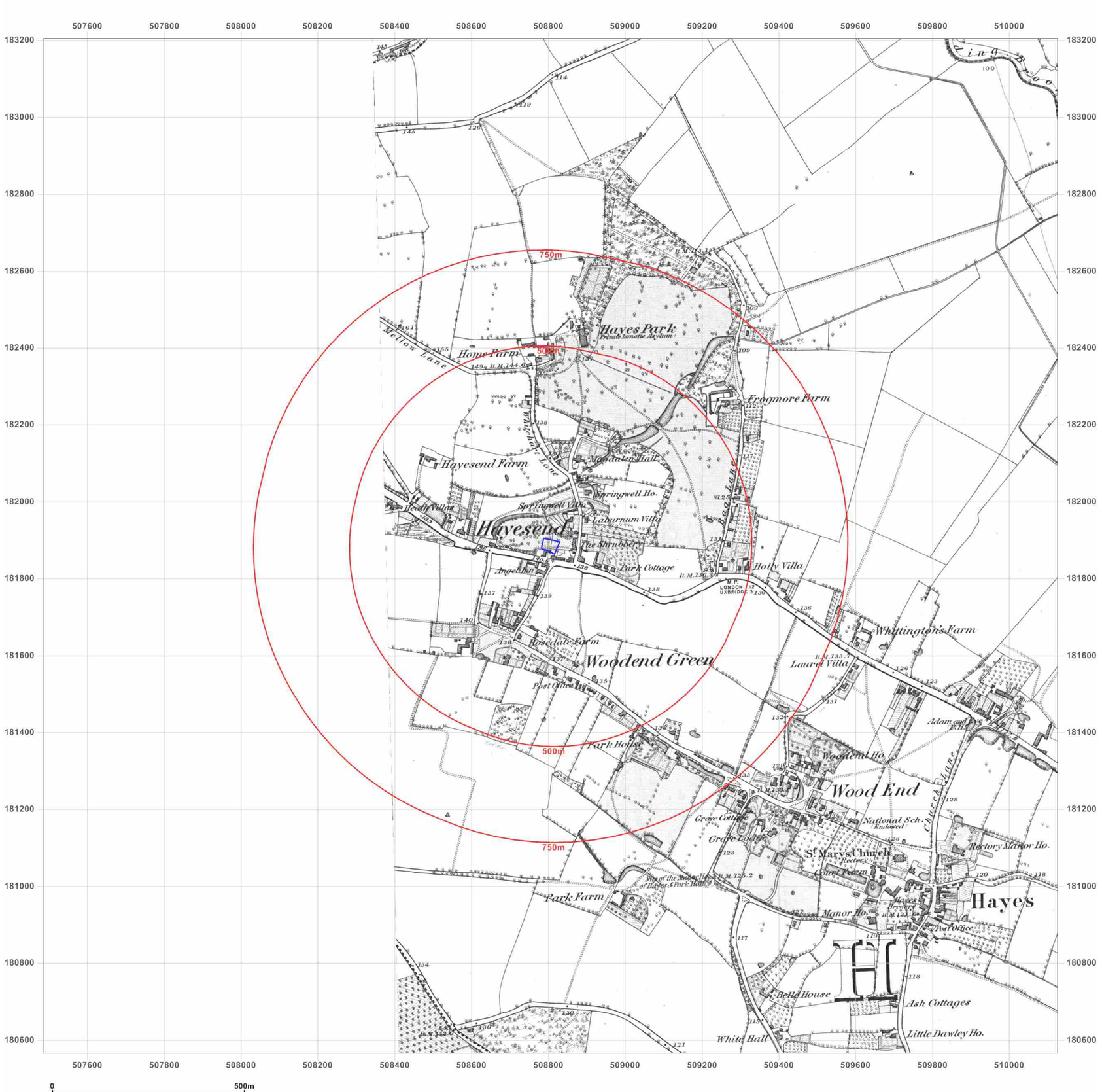
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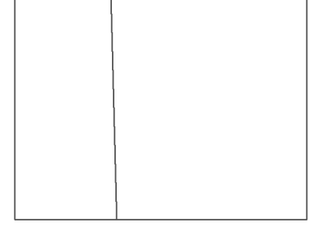
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Map date: **1868**

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Surveyed 1865
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Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1881**

Scale: 1:10,560

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Edition 1881
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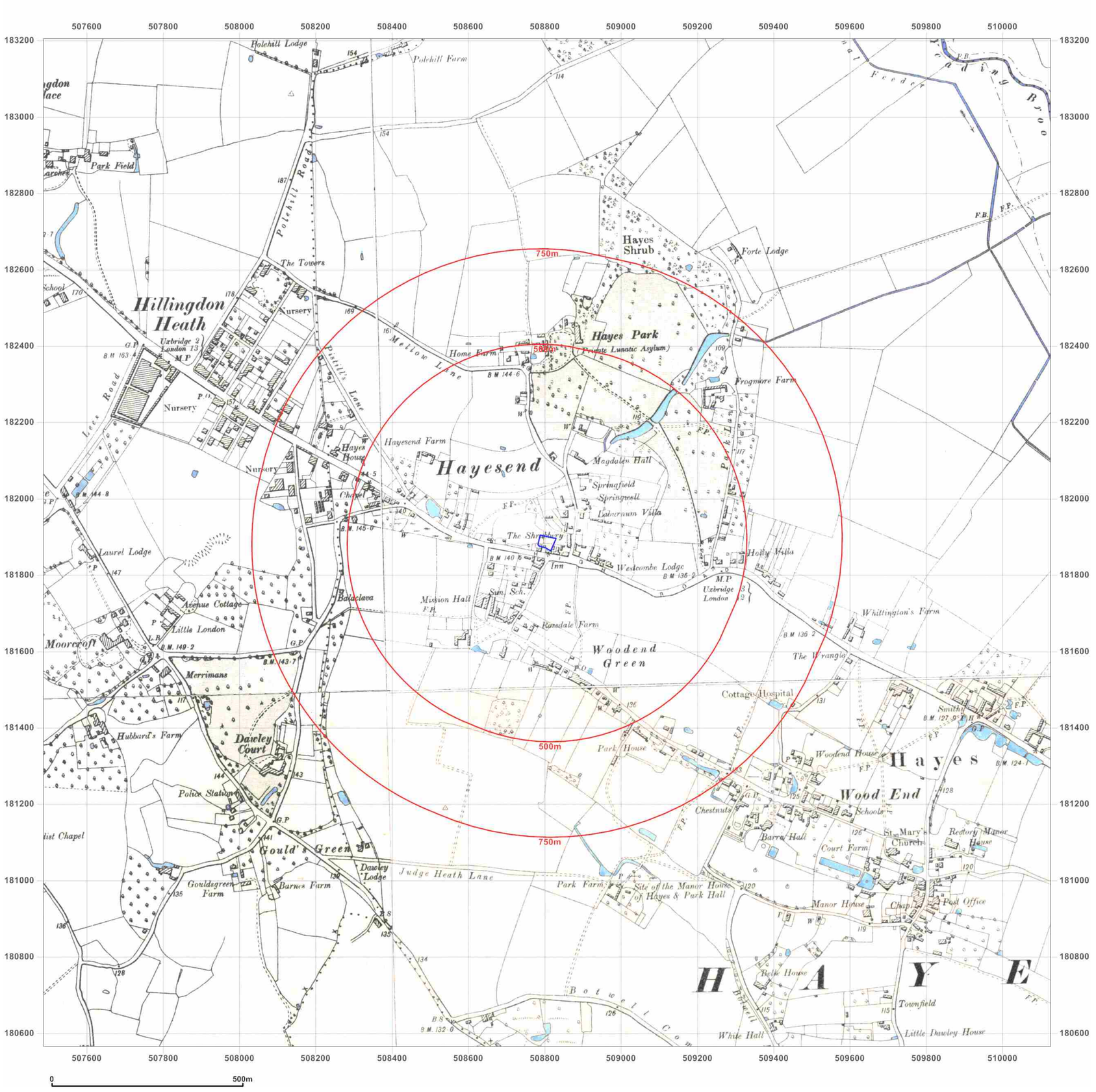
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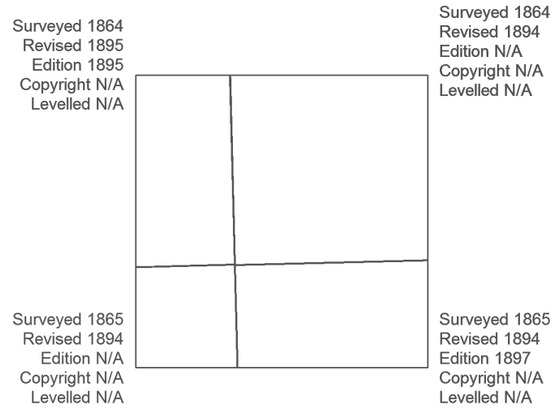
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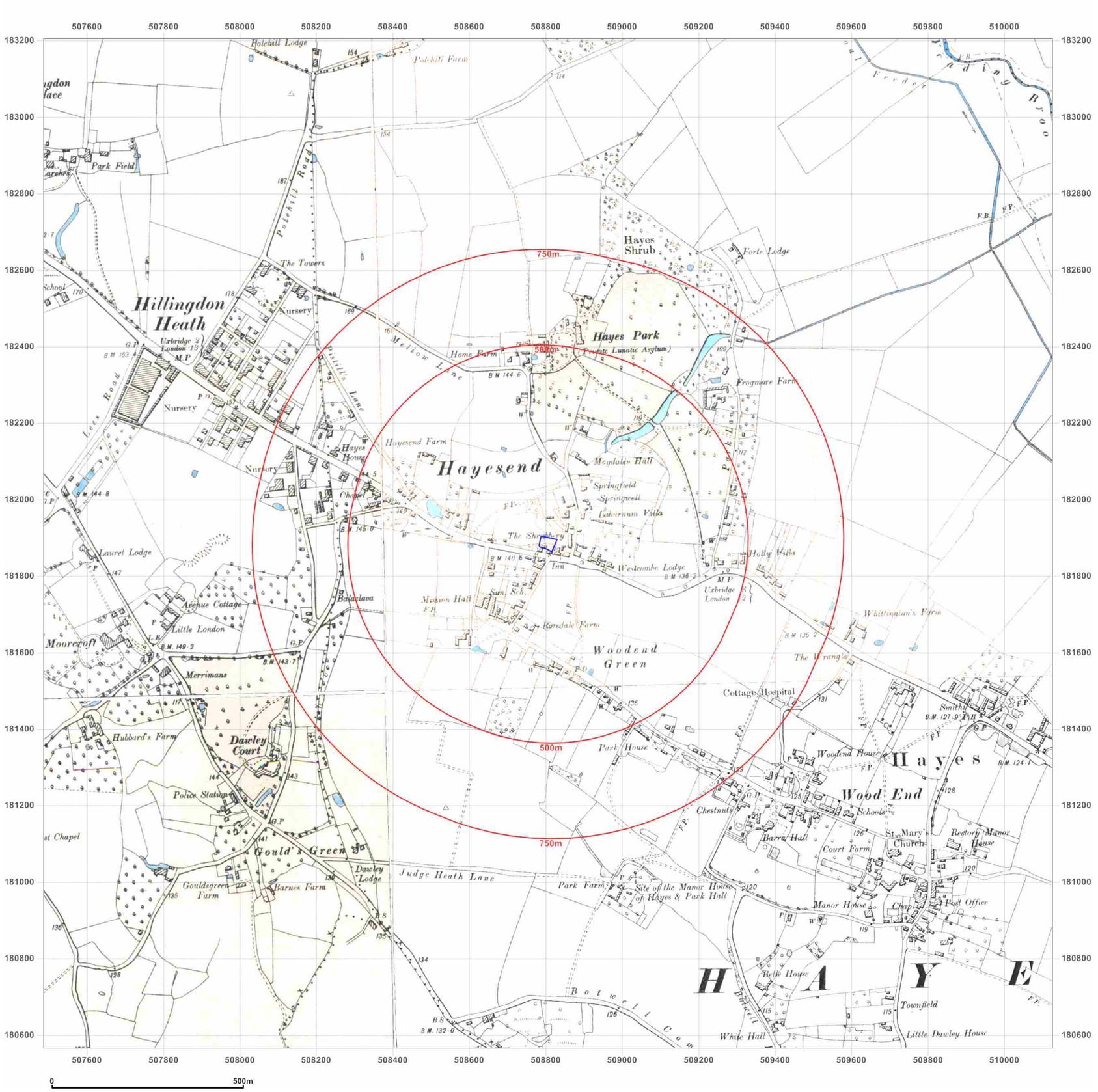
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Map Name: County Series

Map date: **1894-1897**

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Map Name: County Series

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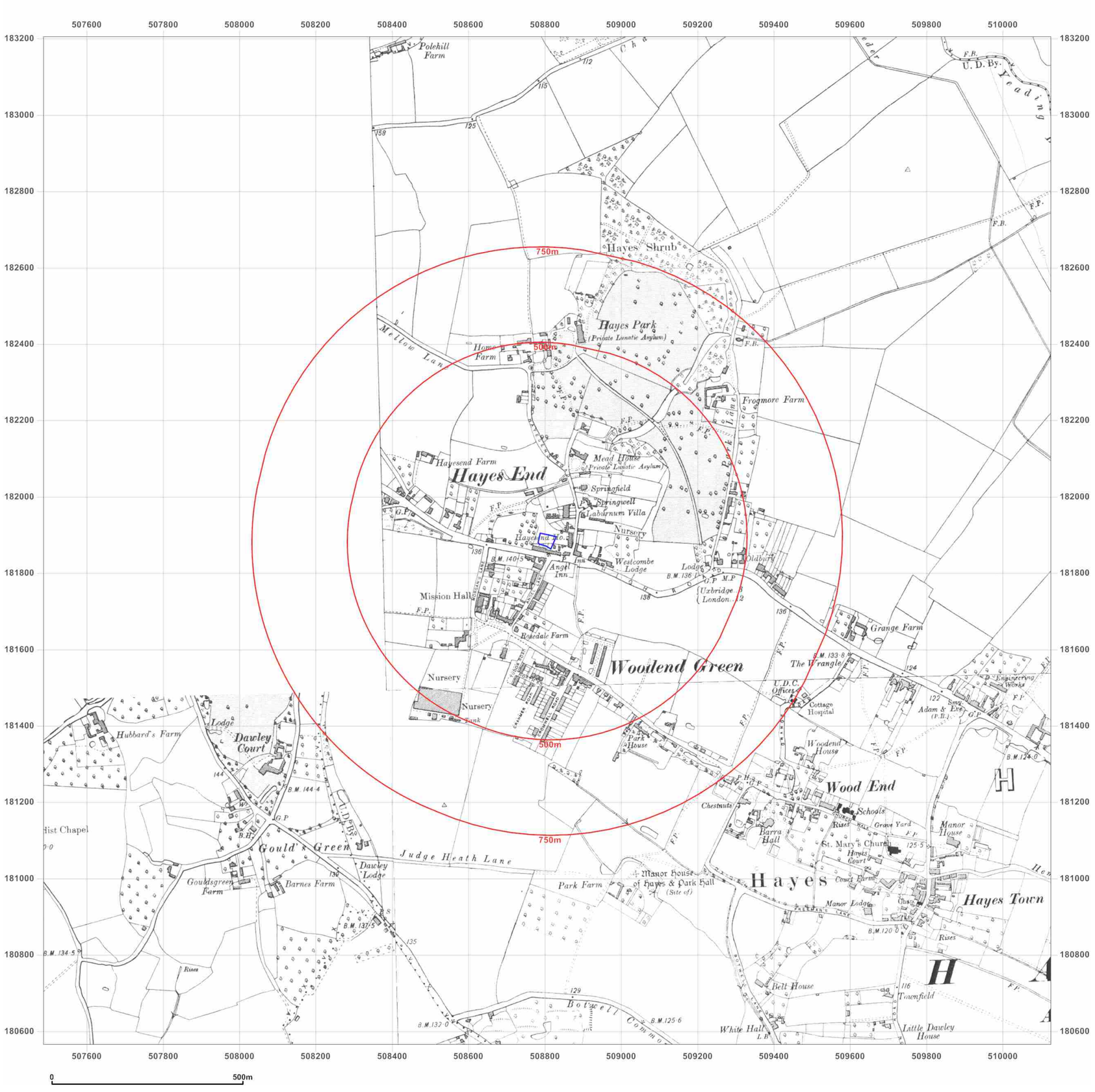
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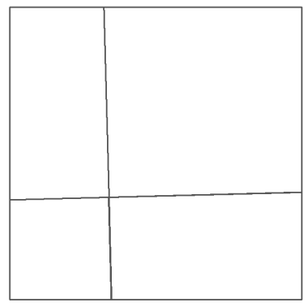
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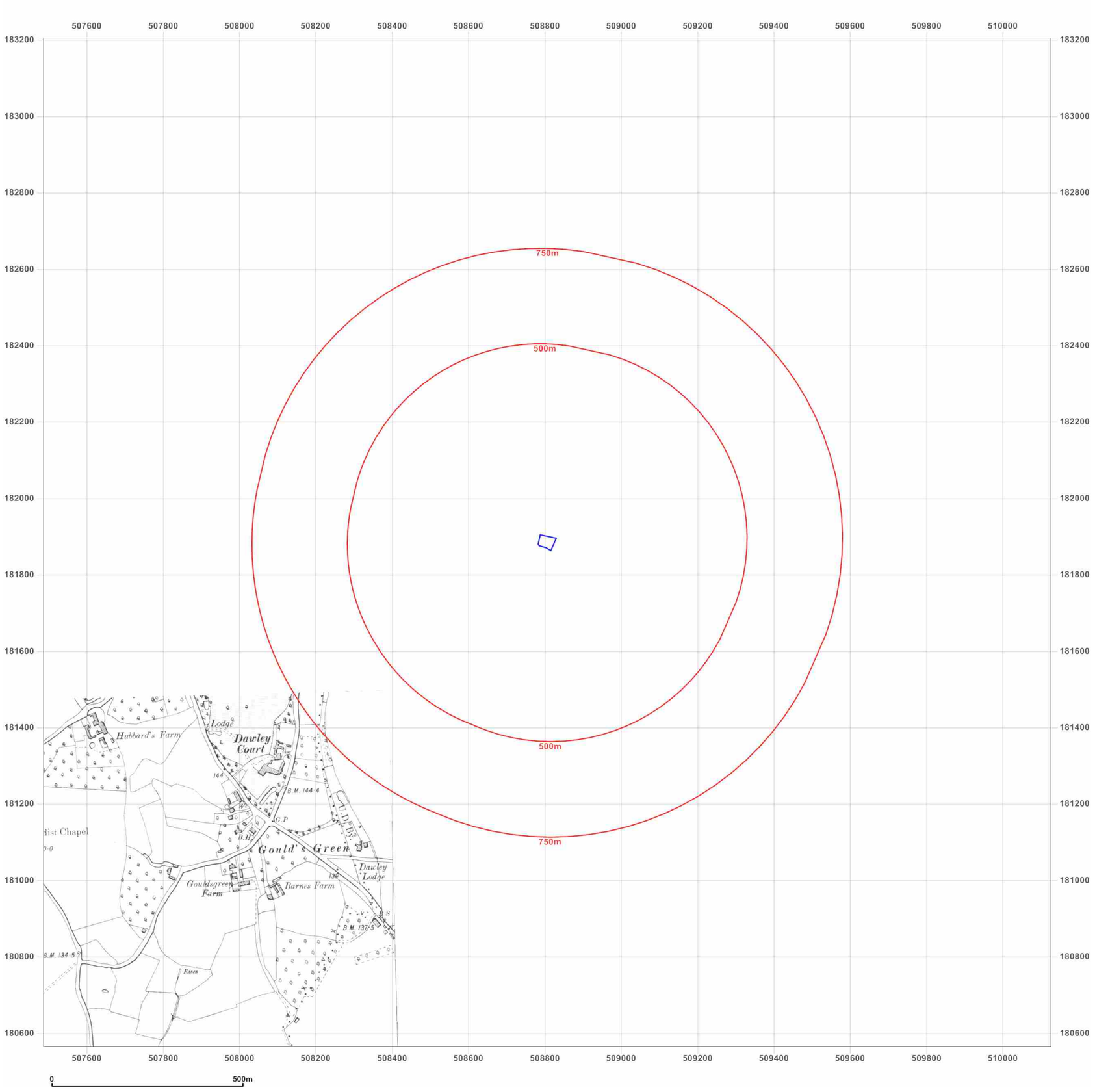
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Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

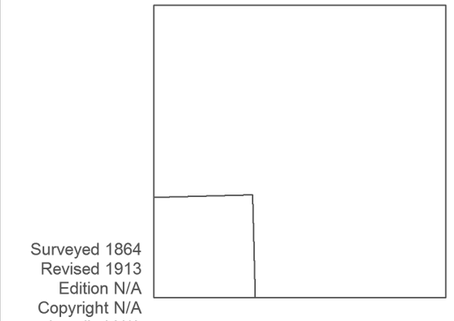
Map Name: County Series

Map date: **1913**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1864
Revised 1913
Edition N/A
Copyright N/A
Levelled N/A

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Site Details:

1200 UXBRIDGE ROAD,
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

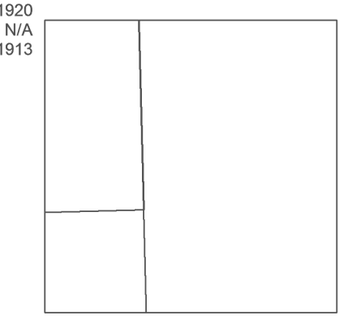
Map date: **1920**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1864
Revised 1913
Edition 1920
Copyright N/A
Levelled 1913



Surveyed 1865
Revised 1913
Edition 1920
Copyright N/A
Levelled 1912

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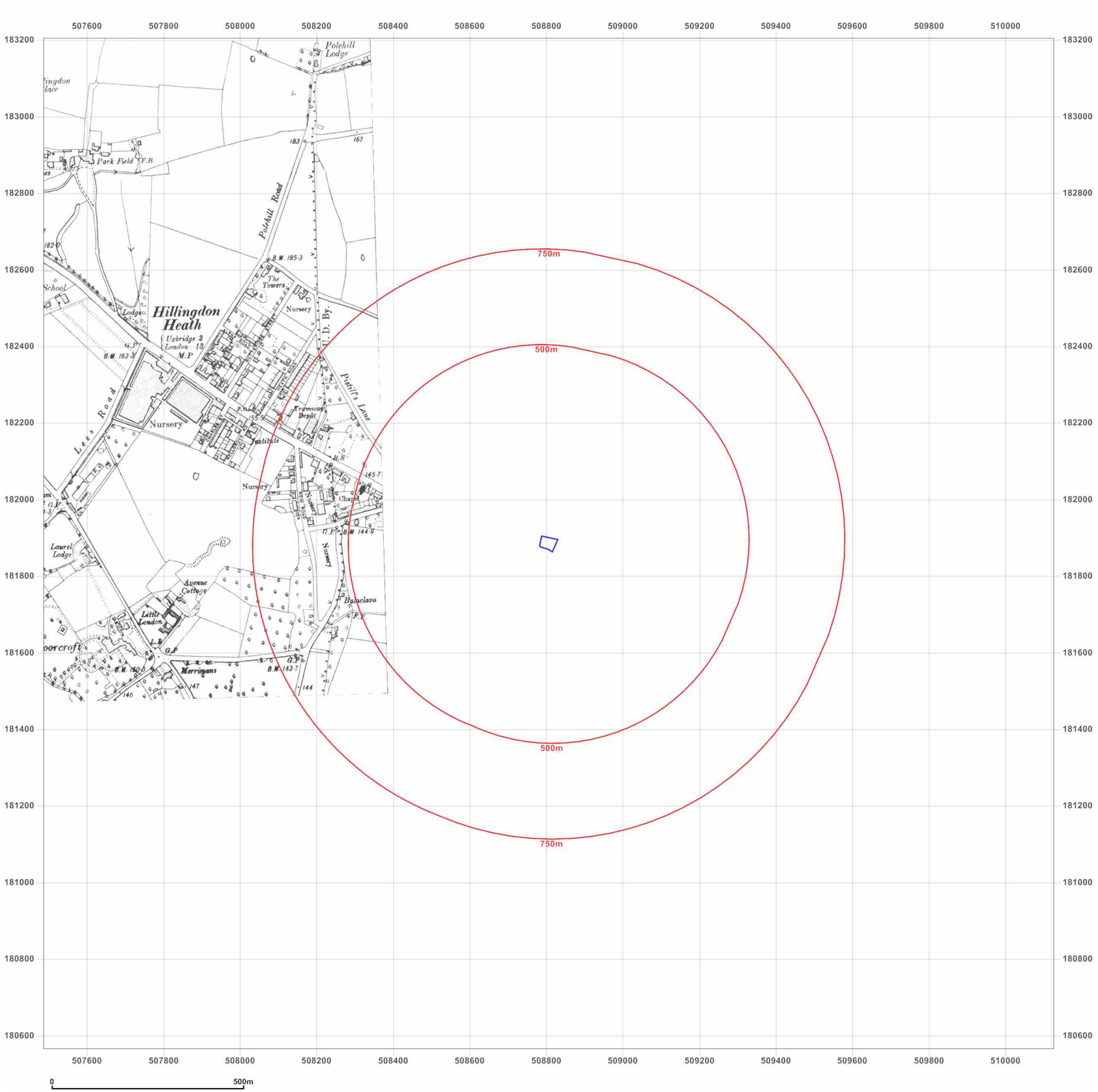
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

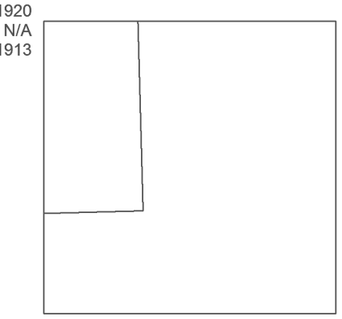
Map date: **1920**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1864
Revised 1913
Edition 1920
Copyright N/A
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1932-1935**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1864
Revised 1935
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1874
Revised 1932
Edition 1932
Copyright N/A
Levelled 1923

Surveyed 1874
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1865
Revised 1935
Edition N/A
Copyright N/A
Levelled N/A

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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1935-1938**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1864 Revised 1935 Edition N/A Copyright N/A Levelled N/A		Surveyed 1864 Revised 1938 Edition 1938 Copyright N/A Levelled N/A
Surveyed 1864 Revised 1935 Edition N/A Copyright N/A Levelled N/A		Surveyed 1865 Revised 1938 Edition 1938 Copyright N/A Levelled N/A

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507600
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509800
510000
183200
183000
182800
182600
182400
182200
182000
181800
181600
181400
181200
181000
180800
180600
750m
500m
300m
750m
HAYES
HAYES END
WOOD END GREEN
GOULD'S GREEN
WOOD END
Hayes Park
Hayes Brub
Mead House
Springfield
Springwell
Laburnum Villa
Westcombe Lodge
Oldbury
Rosedale Farm
Allotment Gdns.
Recreation Ground
Club
Cottage Hospital
Hayes House Hotel
The Wrangle
Park House
Woodend House
Cricket Ground
Schools
Rectory
Manor House
Town Hall
St. Mary's Church (Rectory)
Hayes Court
Lych Gate
Court Farm
Manor Lodge
Manor House of Hayes & Park Hall (Site of)
Royal Oak (P.H.)
Football Ground
Bell House
Townfield
Sports Ground
White Hall
Little
Pole Hill Lodge
Polehill Farm
Parkfield
Allotment Gardens
Nursery
Home Farm
Lodge
Melbar Lane
Sports Ground
Laurel Lodge
Avenue Cottage
Moorcroft
Sports Ground
Merrimans
Hubbard's Farm
Gravel Pit
Gouldsgreen Farm
Dawley Lodge
St Jerome's Church
Barnes Farm
School
Nursery
Watercress Bed
Avenue Cottage
Balaclava
Recreation Ground
Club
Rosedale Farm
Allotment Gdns.
Park House
Cricket Ground
Schools
Rectory
Town Hall
Manor House
Court Farm
Manor Lodge
Football Ground
Bell House
Townfield
Sports Ground
White Hall
Hall
School
Uxbridge
London
Sports Ground
Parkfield
Allotment Gardens
Nursery
Sch.
Hayes Park
Home Farm
Lodge
Melbar Lane
Mead House
Springfield
Springwell
Laburnum Villa
Westcombe Lodge
Oldbury
Rosedale Farm
Allotment Gdns.
Recreation Ground
Club
Cottage Hospital
Hayes House Hotel
The Wrangle
Park House
Woodend House
Cricket Ground
Schools
Rectory
Manor House
Town Hall
St. Mary's Church (Rectory)
Hayes Court
Lych Gate
Court Farm
Manor Lodge
Manor House of Hayes & Park Hall (Site of)
Royal Oak (P.H.)
Football Ground
Bell House
Townfield
Sports Ground
White Hall
Hall
School
Pole Hill Lodge
Polehill Farm
Parkfield
Allotment Gardens
Nursery
Home Farm
Lodge
Melbar Lane
Sports Ground
Laurel Lodge
Avenue Cottage
Moorcroft
Sports Ground
Merrimans
Hubbard's Farm
Gravel Pit
Gouldsgreen Farm
Dawley Lodge
St Jerome's Church
Barnes Farm
School
Nursery
Watercress Bed
Avenue Cottage
Balaclava
Recreation Ground
Club
Rosedale Farm
Allotment Gdns.
Park House
Cricket Ground
Schools
Rectory
Town Hall
Manor House
Court Farm
Manor Lodge
Football Ground
Bell House
Townfield
Sports Ground
White Hall
Hall
School
THAMES ABOVE TEDDINGTON LOCK
Uxbridge Place
Reading B.
Broadway
Yeading Brook
Yeading Brook
Yeading Brook



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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

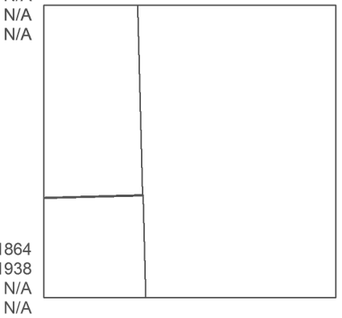
Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1864
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1864
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

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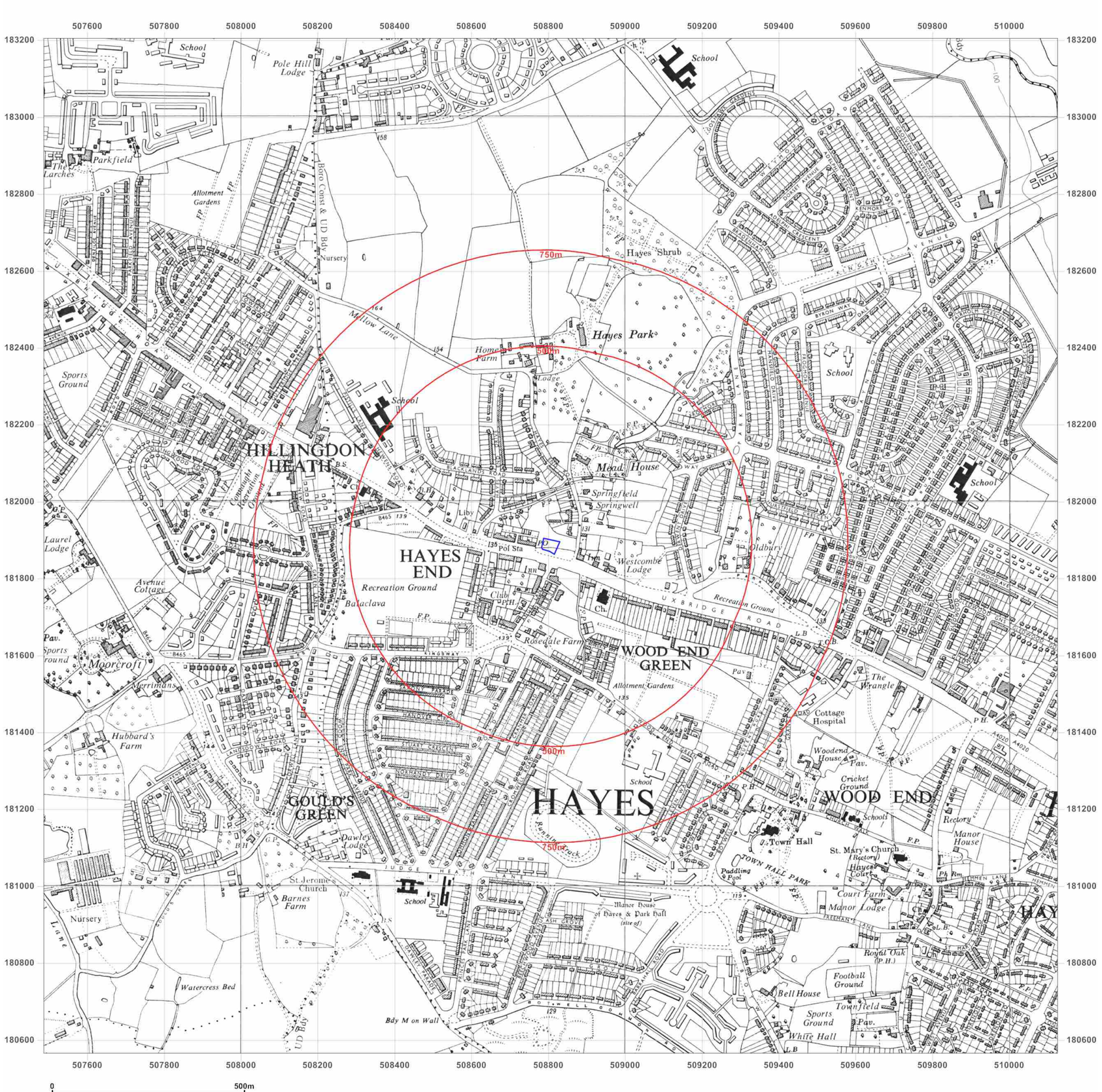
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: Provisional

Map date: **1960**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed N/A
Revised 1959
Edition N/A
Copyright 1960
Levelled N/A

Surveyed N/A
Revised 1959
Edition N/A
Copyright 1960
Levelled N/A

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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: Provisional

Map date: **1966-1970**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed N/A
Revised 1970
Edition N/A
Copyright 1970
Levelled N/A

Surveyed 1966
Revised 1966
Edition N/A
Copyright N/A
Levelled N/A

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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1973-1975**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
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Surveyed 1975
Revised 1975
Edition N/A
Copyright 1976
Levelled 1972

Surveyed 1973
Revised 1973
Edition N/A
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1990-1994**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
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Surveyed 1988
Revised 1989
Edition N/A
Copyright 1990
Levelled 1972

Surveyed 1983
Revised 1994
Edition N/A
Copyright N/A
Levelled N/A

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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: 1:10,000 Raster

Map date: **2002**

Scale: 1:10,000

Printed at: 1:10,000

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2002

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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
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2010

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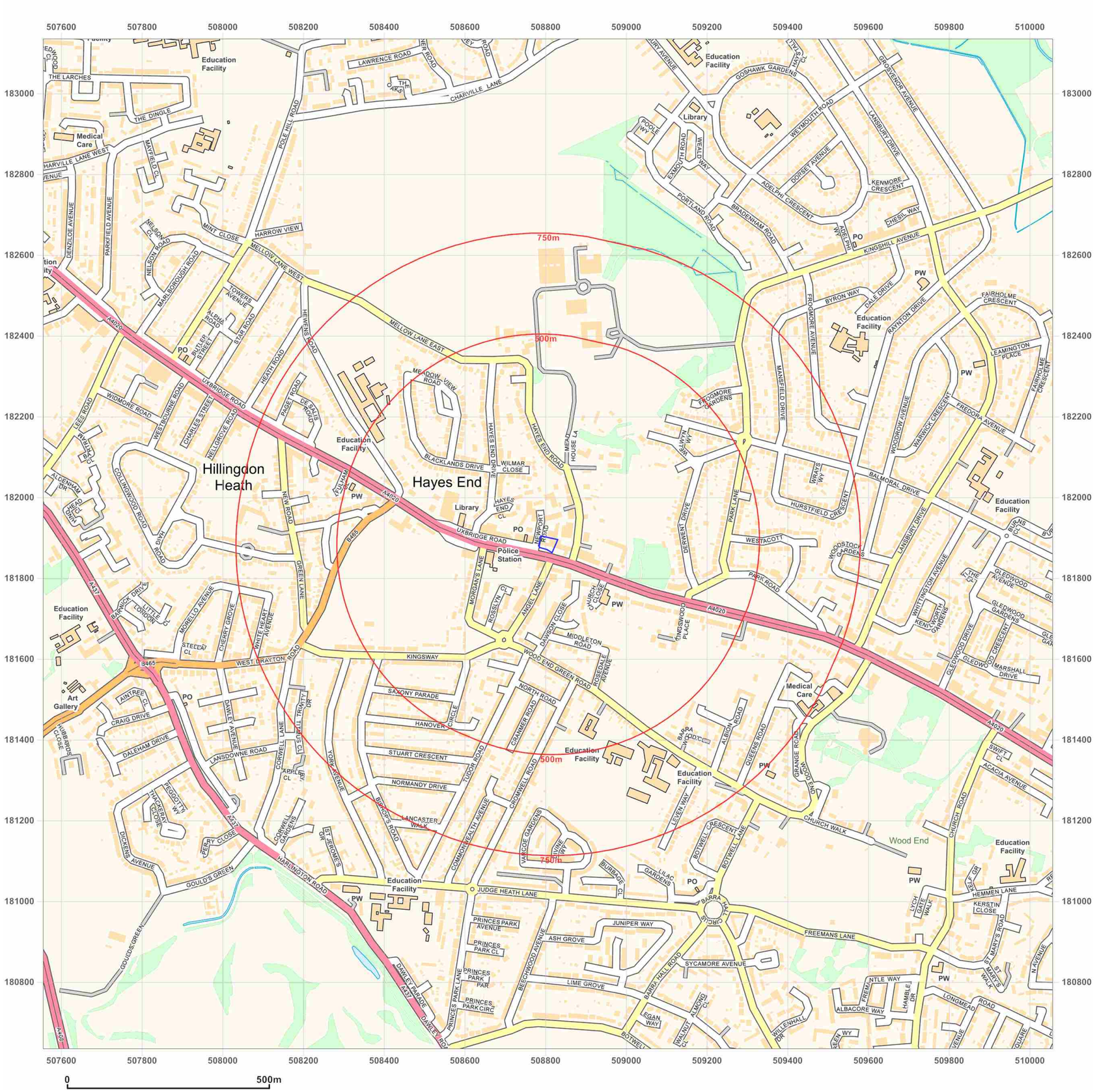
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **2014**

Scale: 1:10,000

Printed at: 1:10,000

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2014

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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1866**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1866
Revised 1866
Edition N/A
Copyright N/A
Levelled N/A

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Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1895**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1895
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

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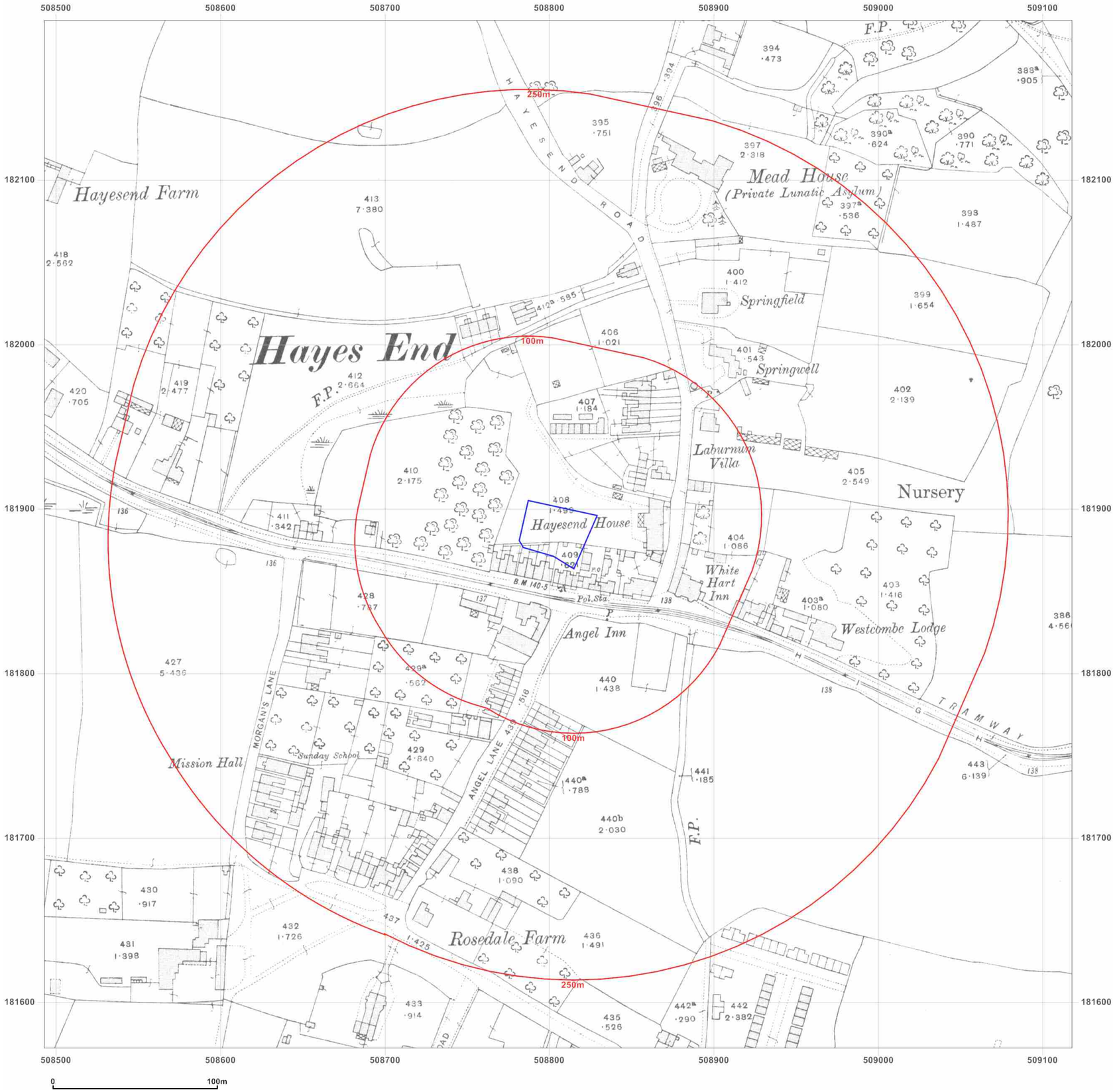
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1914**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1914
Revised 1914
Edition N/A
Copyright N/A
Levelled N/A

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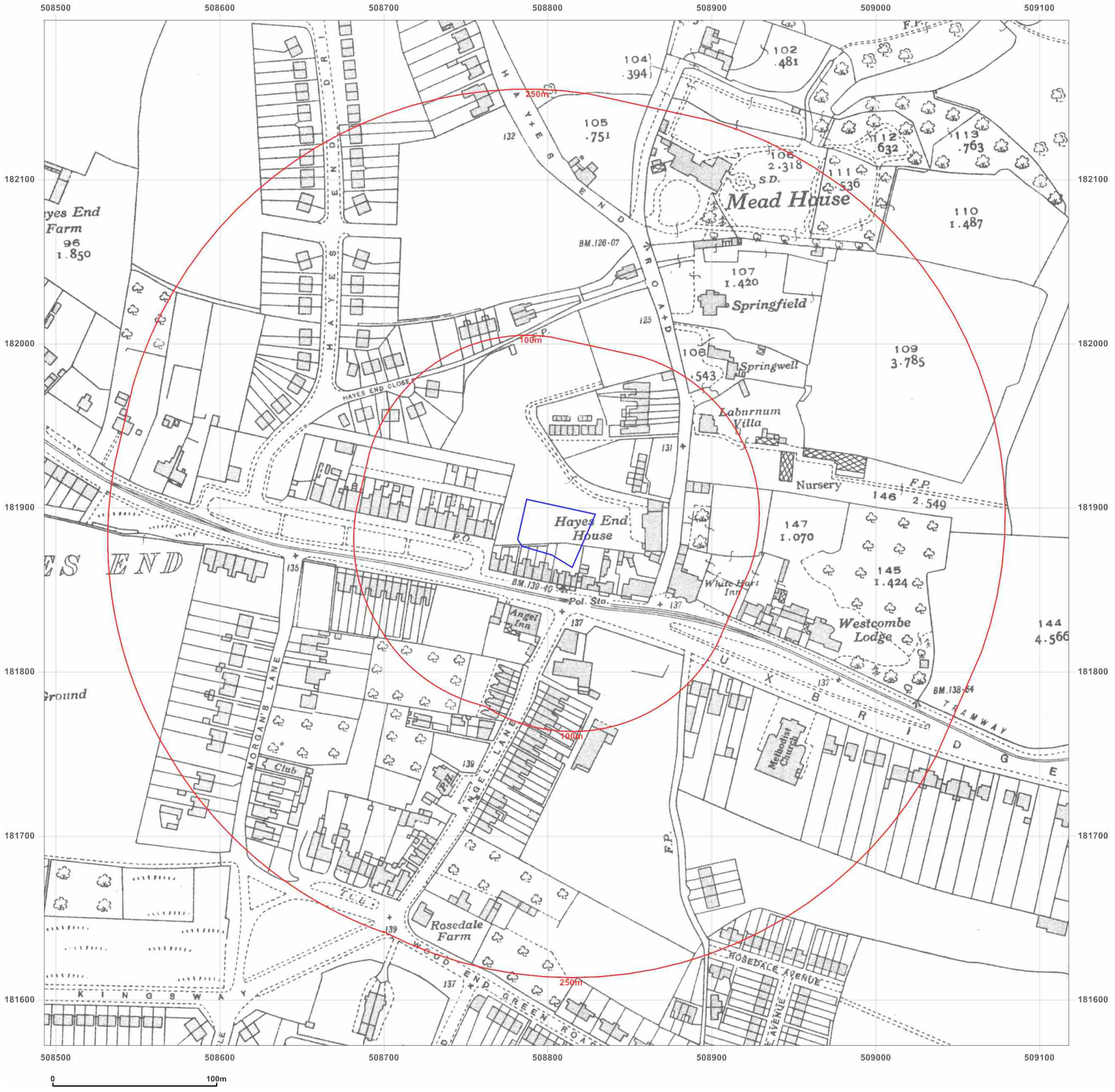
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1935**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1935
Revised 1935
Edition N/A
Copyright N/A
Levelled N/A

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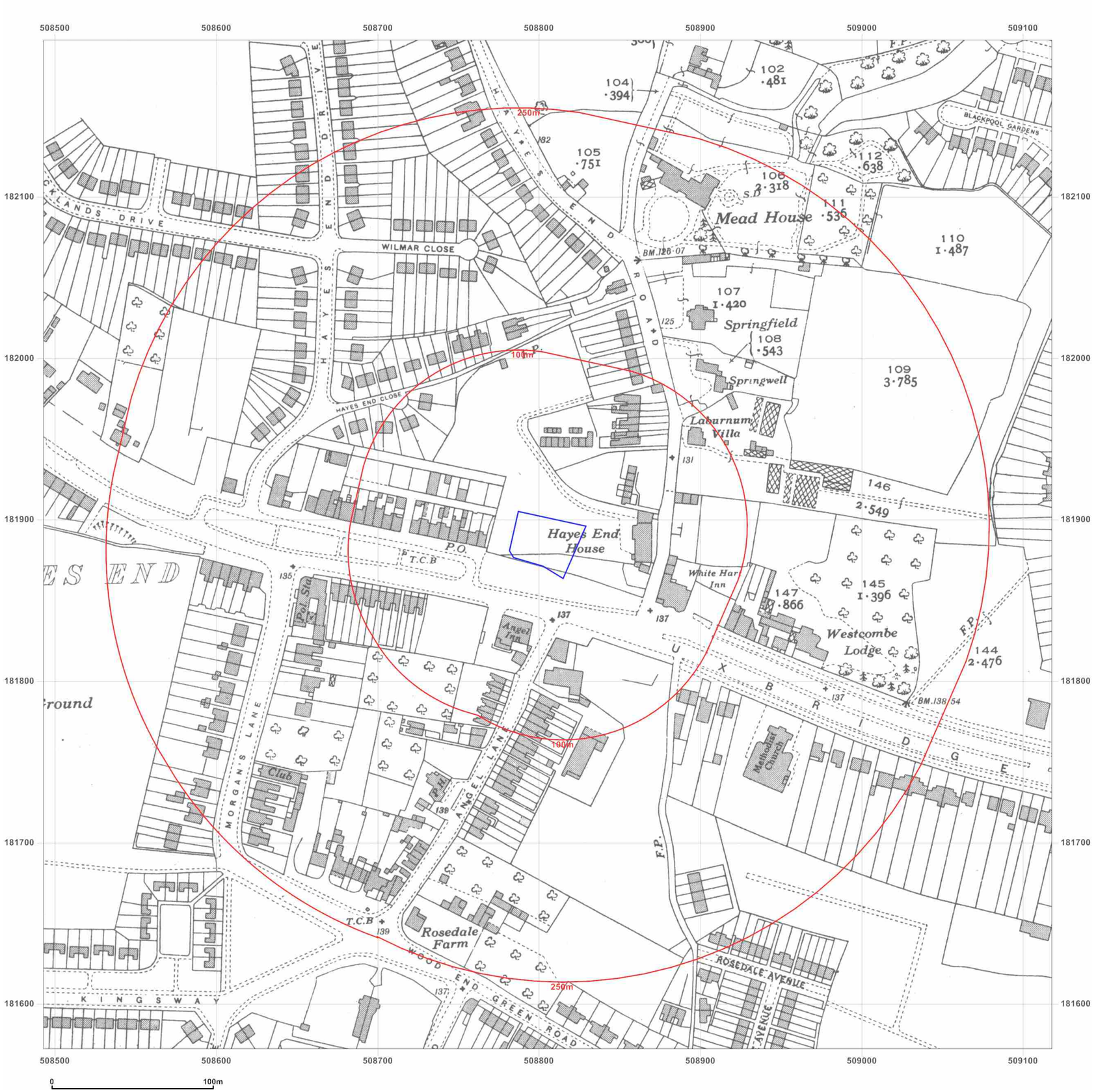
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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: County Series

Map date: **1940**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1940
Revised 1940
Edition N/A
Copyright N/A
Levelled N/A

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HAYES, UB4 8JD

Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1964-1965**

Scale: 1:1,250

Printed at: 1:2,000

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W E
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Surveyed 1963 Revised 1963 Edition N/A Copyright 1964 Levelled 1957	Surveyed 1963 Revised 1963 Edition N/A Copyright 1964 Levelled 1957
Surveyed 1964 Revised 1964 Edition N/A Copyright 1965 Levelled 1957	Surveyed 1964 Revised 1964 Edition N/A Copyright 1965 Levelled 1957

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Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1964-1965**

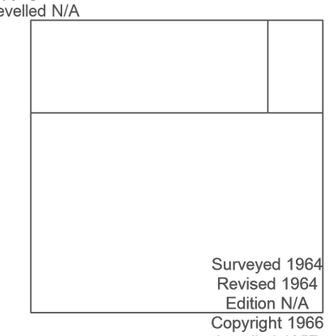
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Printed at: 1:2,500

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

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



Surveyed 1964
Revised 1964
Edition N/A
Copyright 1966
Levelled 1957

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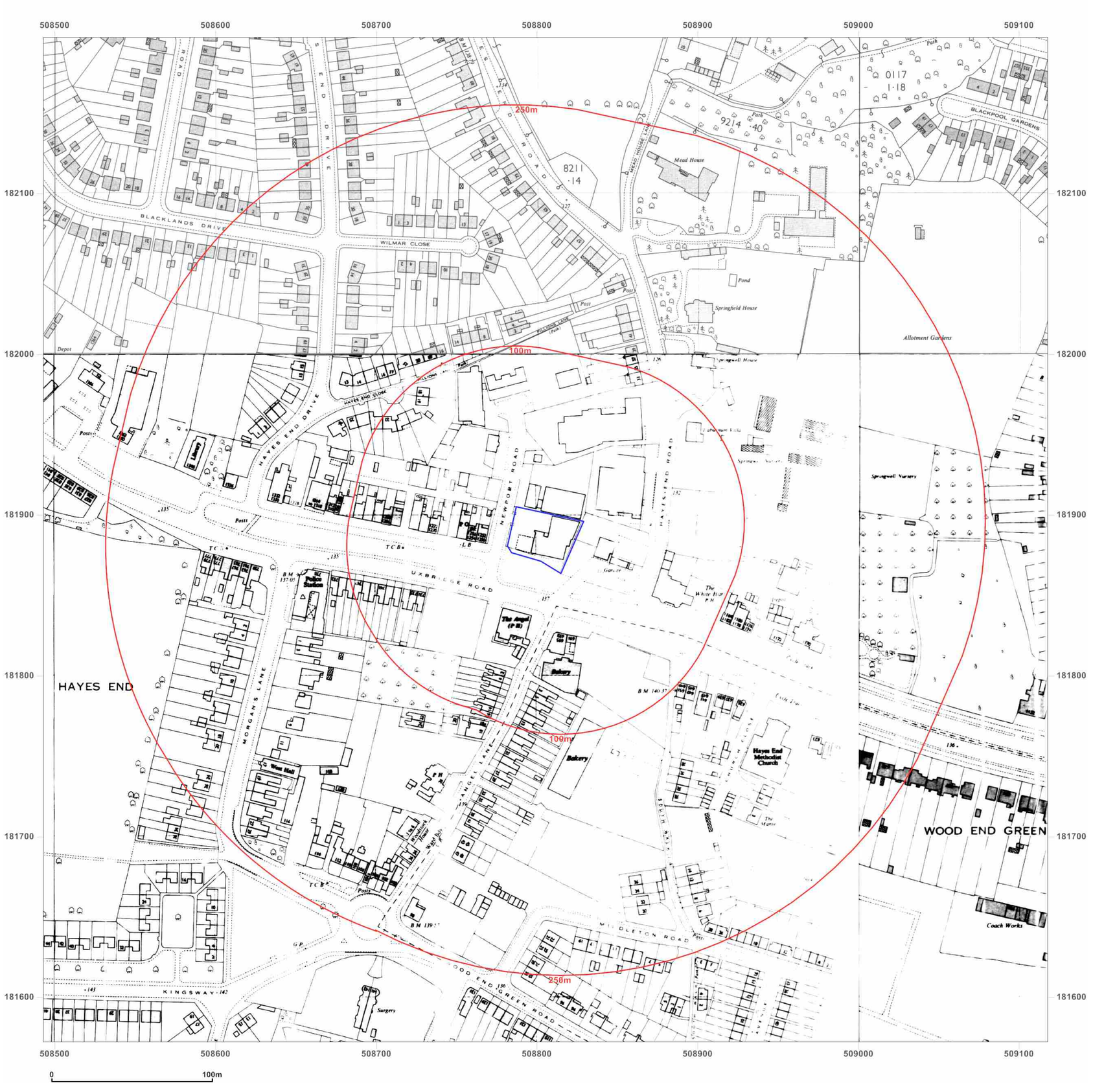
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Site Details:

1200 UXBRIDGE ROAD,
HAYES, UB4 8JD

Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1963-1966**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1963
Revised 1963
Edition 1965
Copyright 1965
Levelled 1957

Surveyed N/A
Revised 1964
Edition 1966
Copyright N/A
Levelled N/A

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

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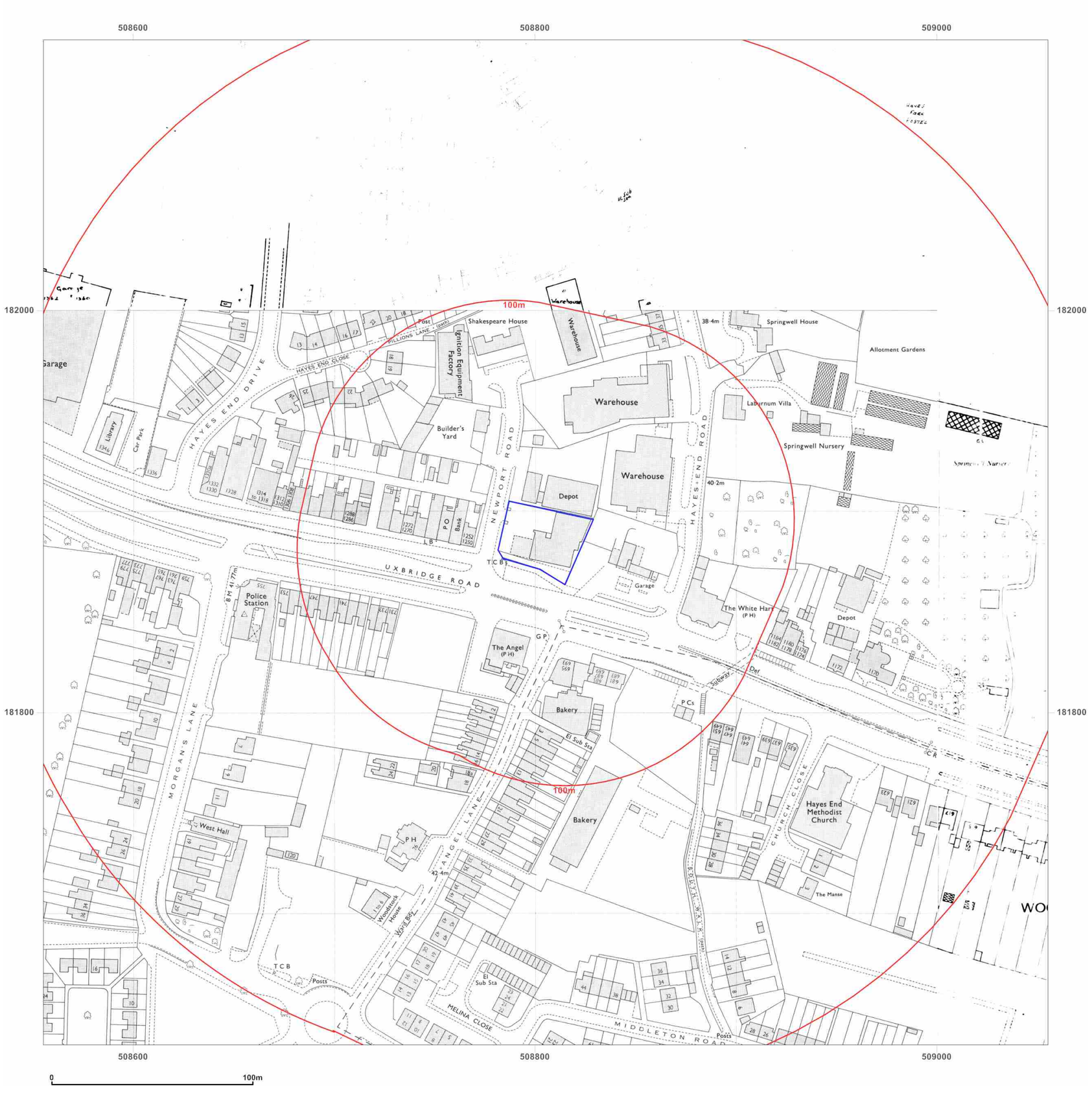
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Site Details:

1200 UXBRIDGE ROAD,
HAYES, UB4 8JD

Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1972-1975**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed N/A
Revised N/A
Edition N/A
Copyright 1975
Levelled N/A

Surveyed 1964 Revised 1971 Edition N/A Copyright 1972 Levelled 1957	Surveyed N/A Revised N/A Edition N/A Copyright 1975 Levelled N/A

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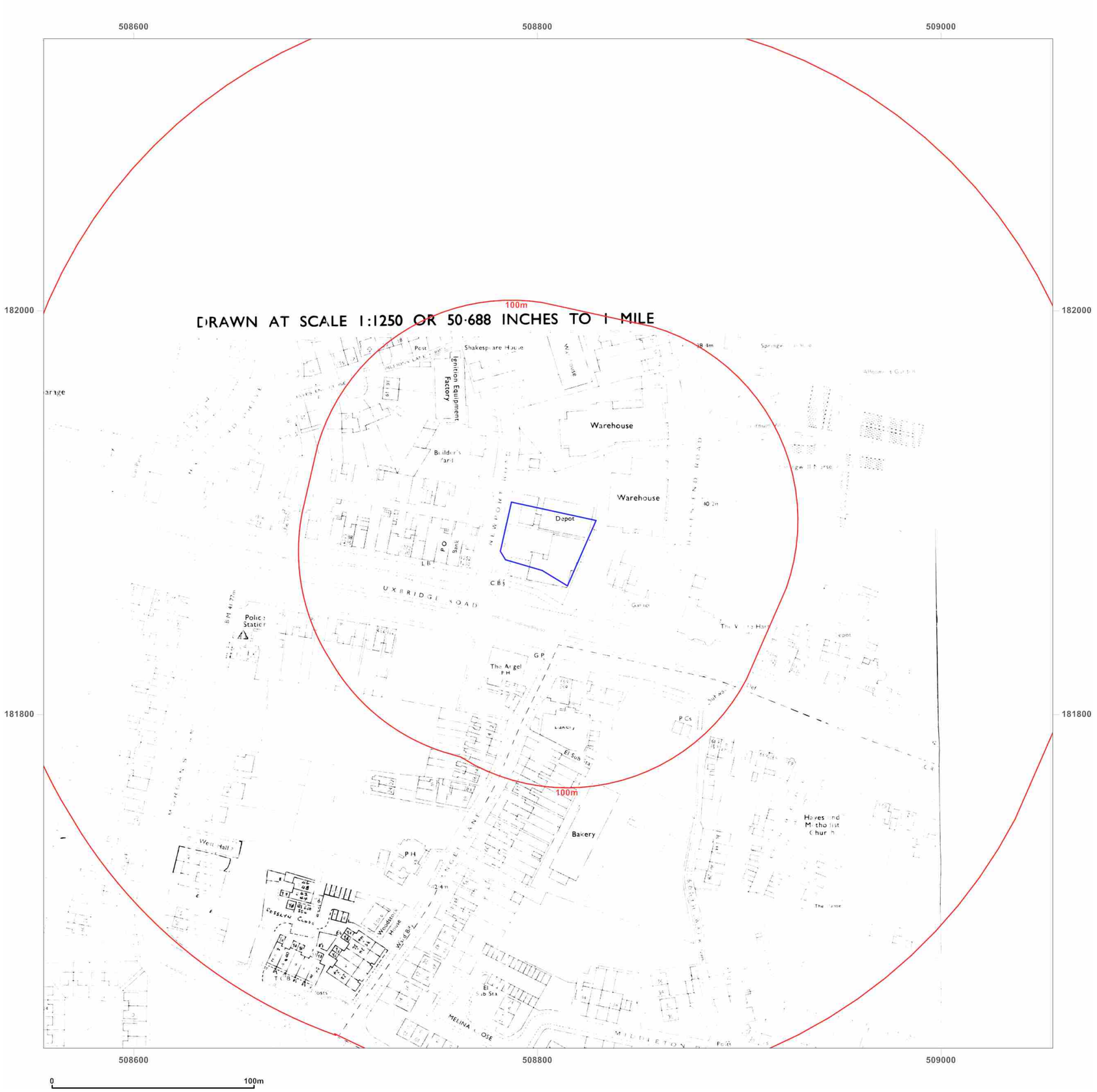
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HAYES, UB4 8JD

Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1975**

Scale: 1:1,250

Printed at: 1:2,000

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

Groundsure INSIGHTS

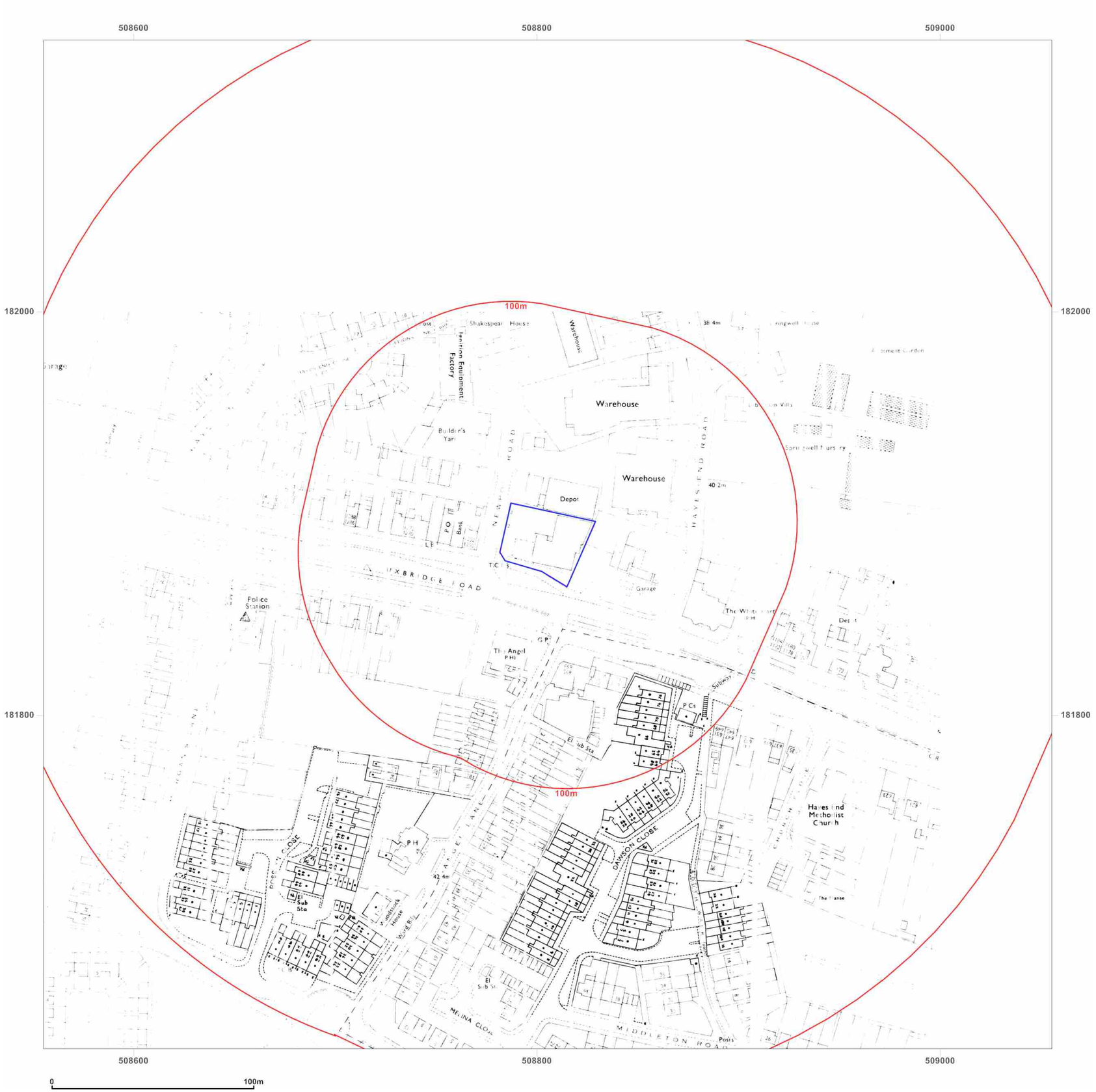
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Site Details:

1200 UXBRIDGE ROAD,
HAYES, UB4 8JD

Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1978**

Scale: 1:1,250

Printed at: 1:2,000

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

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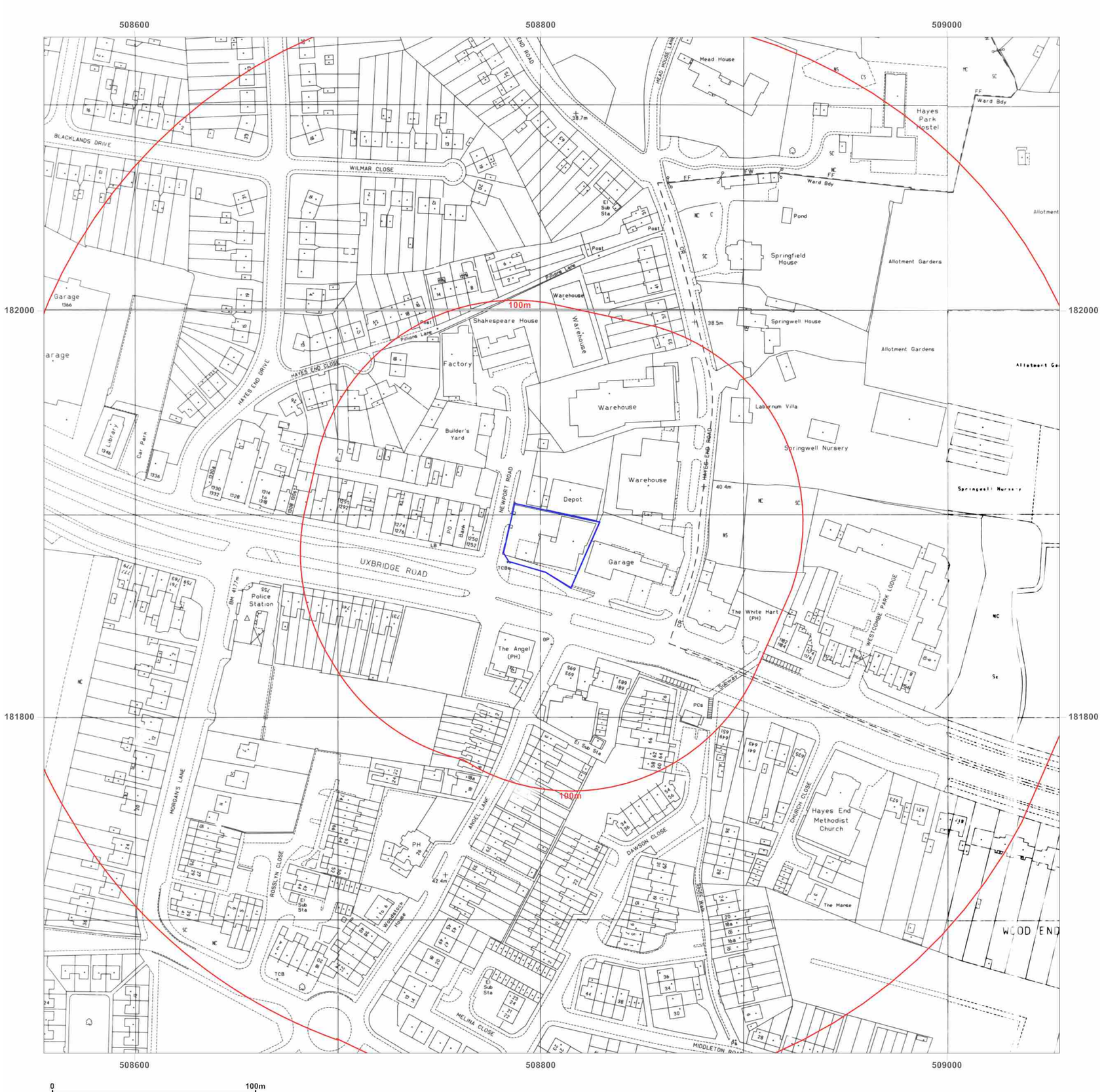
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Site Details:

1200 UXBRIDGE ROAD,
HAYES, UB4 8JD

Client Ref: P16081437-1
Report Ref: HMD-377-5203808
Grid Ref: 508805, 181884

Map Name: National Grid

Map date: **1991-1992**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A
Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A	Surveyed 1964 Revised 1990 Edition N/A Copyright 1991 Levelled N/A

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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 off-site 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

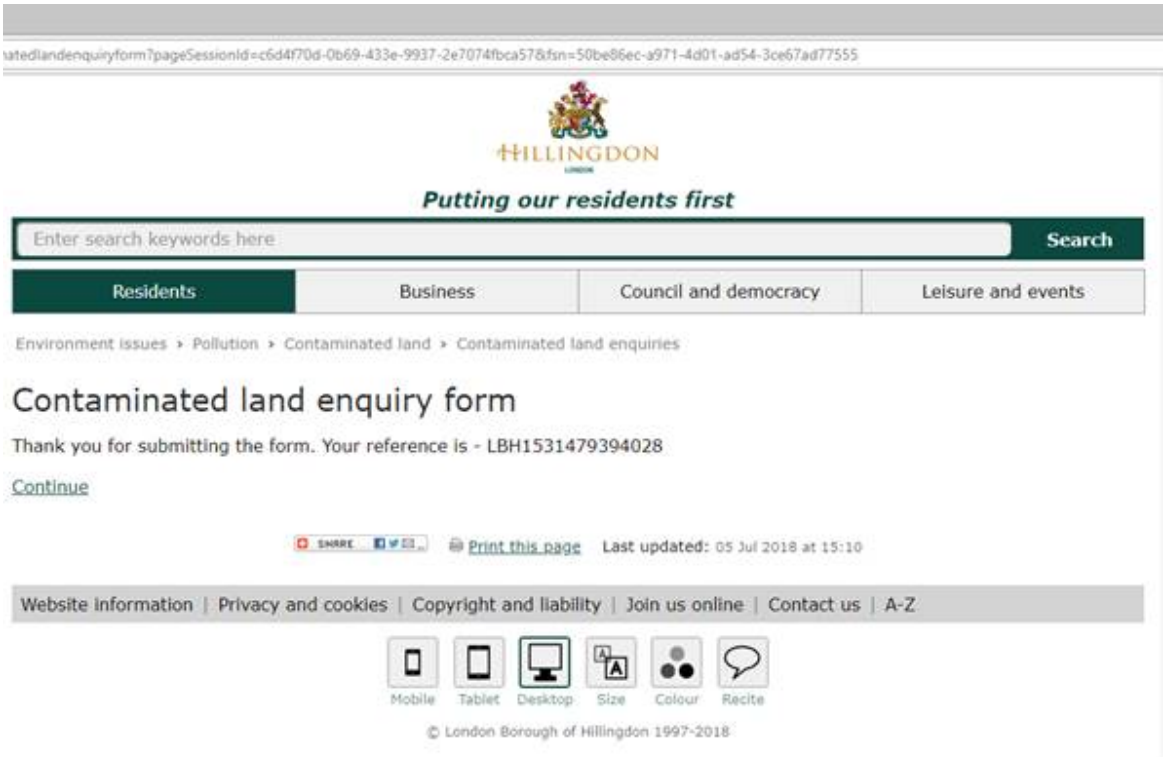
Table A4.4: Definition of Risk Categories and Likely Actions Required

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 INFORMATION

Adam Hines

From: Harry Antoniou <harry.antoniou@diamondcorp.co.uk>
Sent: 13 July 2018 11:58
To: Nicholas Papas
Cc: Andy Paps
Subject: RE: P1608J1437 - AJH - 1200 Uxbridge Road, Hayes, UB4 8JD - Desk Study



From: Nicholas Papas [mailto:Nicholas@papaarchitects.co.uk]
Sent: 13 July 2018 11:41
To: Harry Antoniou <harry.antoniou@diamondcorp.co.uk>
Cc: Andy Paps <andy@papaarchitects.co.uk>
Subject: FW: P1608J1437 - AJH - 1200 Uxbridge Road, Hayes, UB4 8JD - Desk Study

Please see below how to Pay,

Please confirm once you have paid.

Thank you.

Kind Regards,

Nicholas Papas
Director
nicholas@papaarchitects.co.uk

Papa Architects Ltd Office: 020 8348 8411
222 Archway Road, Highgate, London N6 5AX
http://www.papaarchitects.co.uk

RIBA Chartered Practice

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From: amm@jomasassociates.com <amm@jomasassociates.com>
Sent: 13 July 2018 11:18
To: Nicholas Papas <Nicholas@papaarchitects.co.uk>; 'Roni Savage' <rs@jomasassociates.com>
Cc: ajh@jomasassociates.com; eh@jomasassociates.com
Subject: RE: P1608J1437 - AJH - 1200 Uxbridge Road, Hayes, UB4 8JD - Desk Study

Hi Nicholas,

The following instructions can be passed to the client regarding payment for the land contamination enquiry:

The enquiry can be completed via an online form at 'https://www.hillingdon.gov.uk/contaminatedlandenquiryform'
The following information can be copy and pasted into the relevant sections.

Your reference:
P1608J1437

Name/location/address of site of interest:
1200 Uxbridge Road, Hayes, UB4 8JD

Enquiry details:
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 1869 – 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

Additional information:
We are aware of a previous ground investigation undertaken at a petrol station towards the east of site, which noted the decommissioning of 3No underground storage tanks. Furthermore, during a historical map review a depot was identified directly north of site.

Does the Local Authority possess any additional information or records regarding these two adjacent site uses?

Attach a site map or plan (optional)
I have attached a site location plan to this email to be uploaded to the online form.

Any issues regarding this online form please get in touch.

Kind regards,

JOMAS

Alex Marcelo BSc (Hons)
Geotechnical Engineer

Jomas Associates Ltd
Lakeside House
1 Furzeground Way, Stockley Park
UB11 1BD

T: 0843 289 2187
F: 0872 115 4505
M: 07403 927 087

E: amm@jomasassociates.com
www.jomasassociates.com

Accredited Contractor

CONSTRUCTION SKILLS CERTIFICATION SCHEME

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Construction Enquirer Awards
18th OCTOBER 2018

Jomas Associates are pleased to announce that we have been shortlisted for **two** Construction Enquirer Awards. Please click the links and vote for us (It takes less than a minute):
'Best Construction Supplier to Work With' & **'Best Consultant to Work For'**

From: Nicholas Papas <Nicholas@papaarchitects.co.uk>
Sent: 13 July 2018 10:24
To: Roni Savage <rs@jomasassociates.com>
Cc: amm@jomasassociates.com; ajh@jomasassociates.com
Subject: RE: P1608J1437 - AJH - 1200 Uxbridge Road, Hayes, UB4 8JD - Desk Study