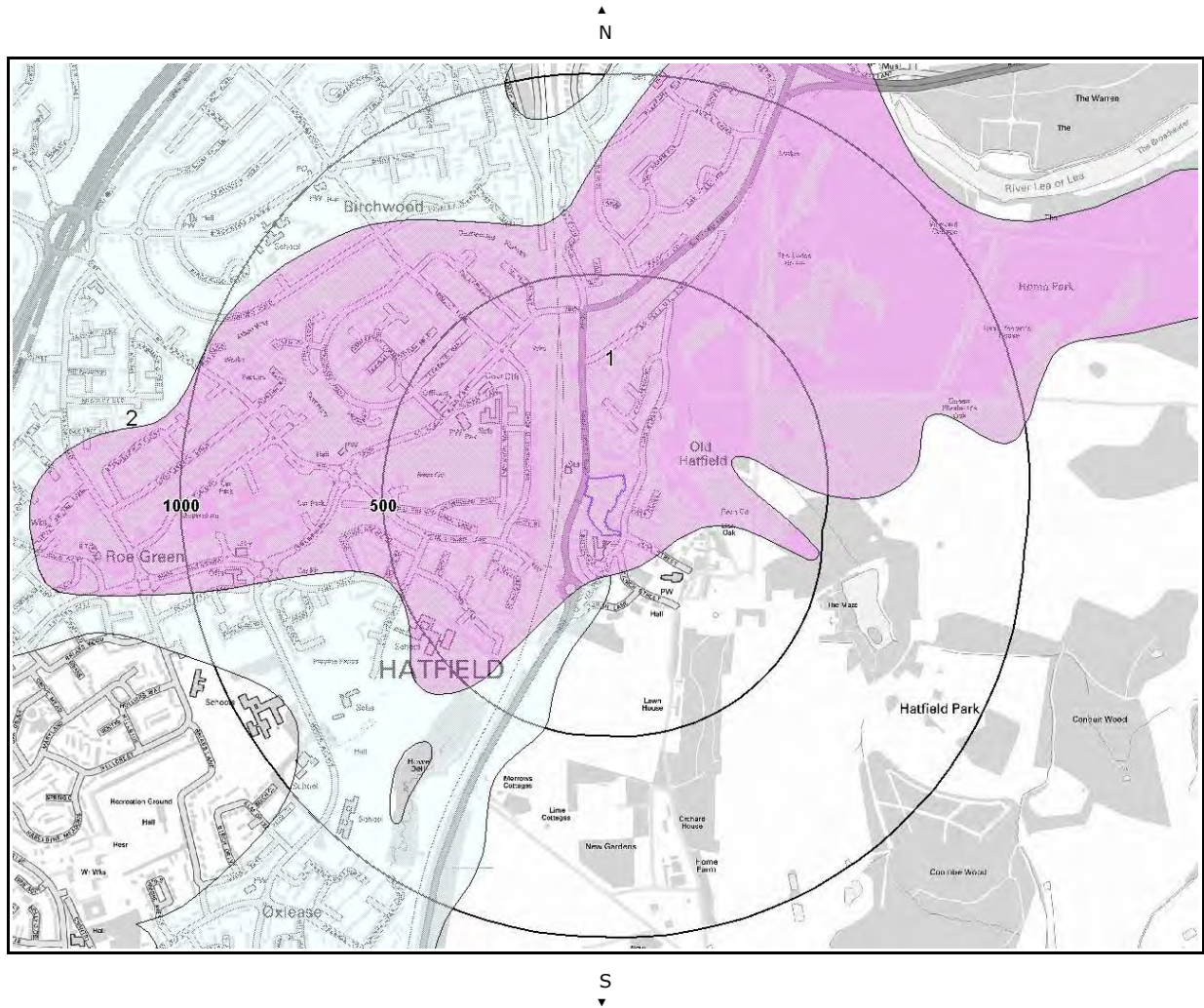


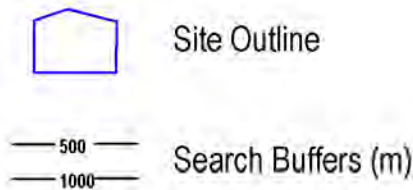
# 1.2 Superficial Deposits and Landslips Map



Superficial and Landslips Legend



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

## 1.2 Superficial Deposits and Landslips

### 1.2.1 Superficial Deposits/Drift Geology

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

ID	Distance (m)	Direction	Lex Code	Description	Rock Description
1	0.0	On Site	KGCA-SAGR	KESGRAVE CATCHMENT SUBGROUP	SAND AND GRAVEL
2	101.0	S	LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON

### 1.2.2 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

### 1.2.3 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, 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.

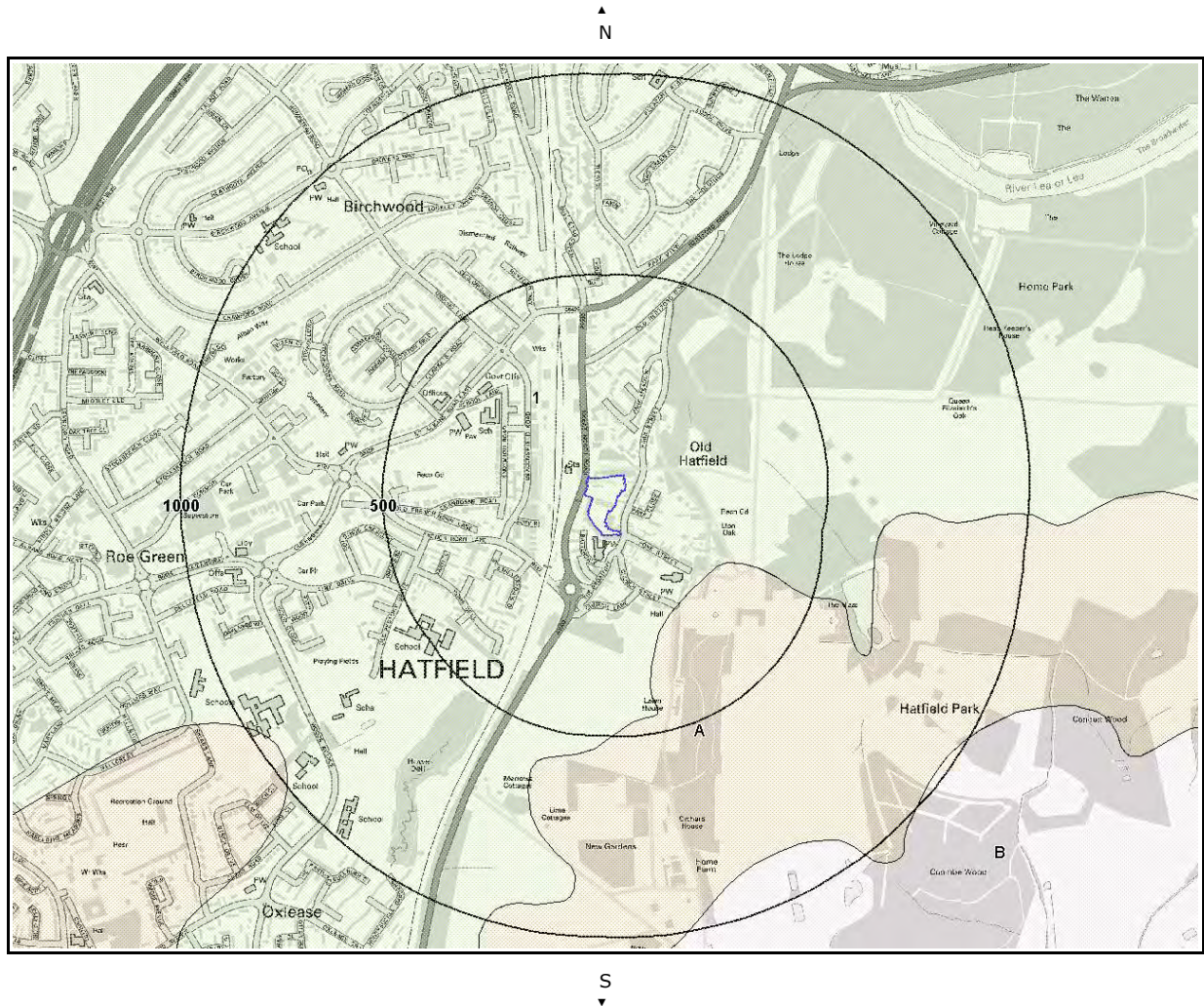
### 1.2.4 Landslip Permeability

**Are there any records relating to permeability of landslips within the study site\* boundary? No**

Database searched and no data found.

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

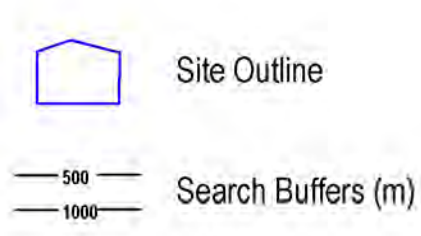
# 1.3 Bedrock and Faults Map



Bedrock & Faults Deposits Legend



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

## 1.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:239

### 1.3.1 Bedrock/Solid Geology

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

ID	Distance (m)	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	LESE-CHLK	Lewes Nodular Chalk Formation And Seaford Chalk Formation (undifferentiated) - Chalk	Santonian / Turonian
2A	219.0	SE	LMBE-CLSS	Lambeth Group - Clay, Silt And Sand	Paleocene
4A	219.0	SE	LMBE-CLSS	Lambeth Group - Clay, Silt And Sand	Paleocene

### 1.3.2 Permeability of Bedrock Ground

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

Distance (m)	Direction	Flow type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	Very High	Very High

### 1.3.3 Faults

**Are there any records of Faults 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 nationwide coverage.

### 1.3.4 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?**

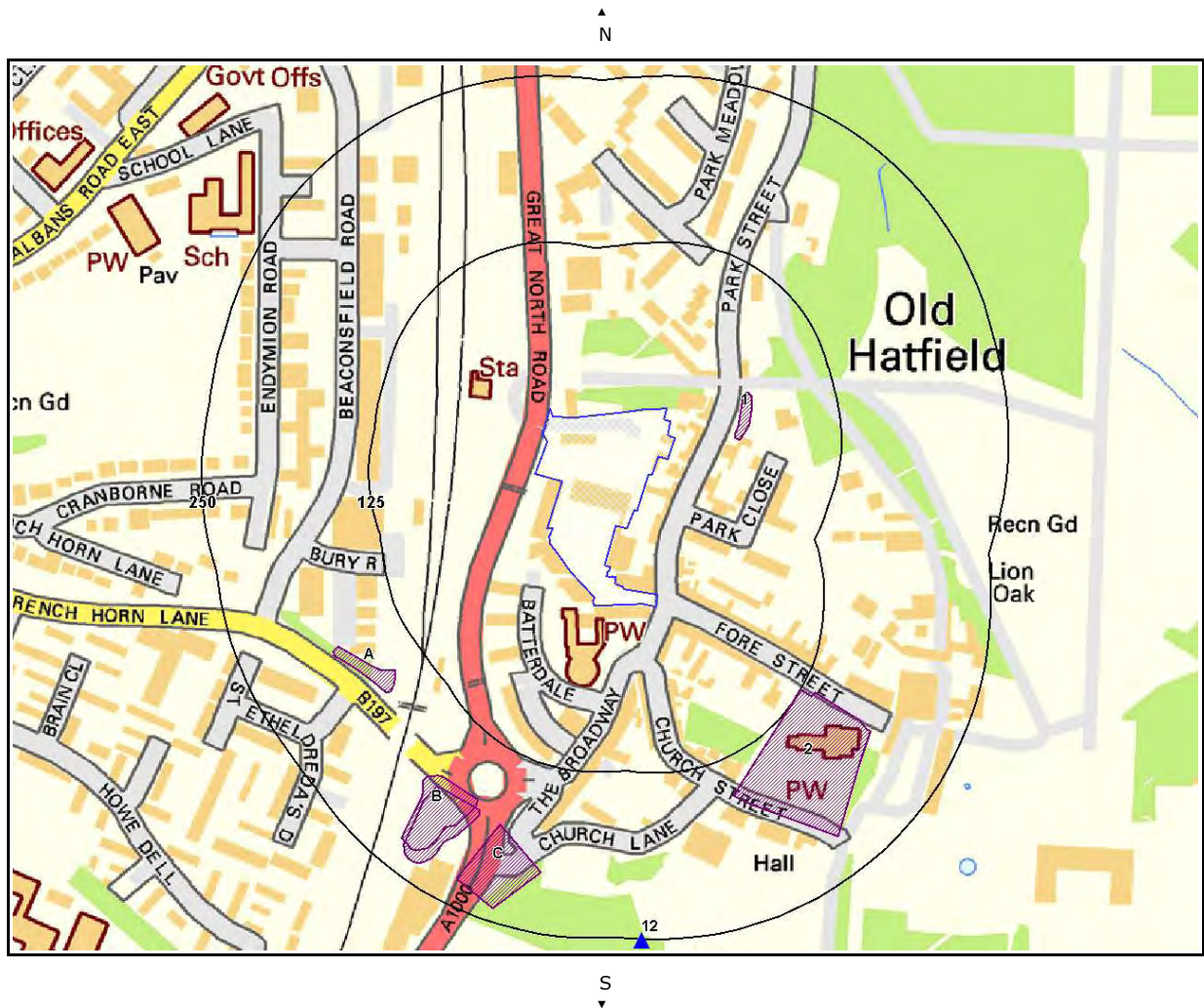
**The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level**

### 1.3.5 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?**

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





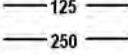
## 2. Ground Workings Map



Ground Workings Legend



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-  Site Outline
-  Historic Surface Ground Workings
-  Historic Underground Workings
-  Current Ground Workings
-  Search Buffers (m)

## 2. Ground Workings

### 2.1 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**

The following Historical Surface Ground Working Features are provided by GroundSure:

ID	Distance (m)	Direction	NGR	Use	Date
1	45.0	E	523437,208730	Unspecified Ground Workings	1922
2	125.0	SE	523480,208469	Grave Yard	1879
3A	149.0	SW	523153,208540	Unspecified Ground Workings	1988
4A	149.0	SW	523153,208540	Unspecified Ground Workings	1973
5B	170.0	SW	523209,208432	Pond	1955
6B	176.0	SW	523211,208423	Pond	1939
7B	176.0	SW	523211,208423	Pond	1922
8B	176.0	SW	523211,208423	Pond	1879
9B	176.0	SW	523211,208423	Pond	1896
10	179.0	SW	523253,208392	Cuttings	1922
C					
11	179.0	SW	523253,208392	Cuttings	1939
C					

### 2.2 Historical Underground Workings 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.

### 2.3 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.

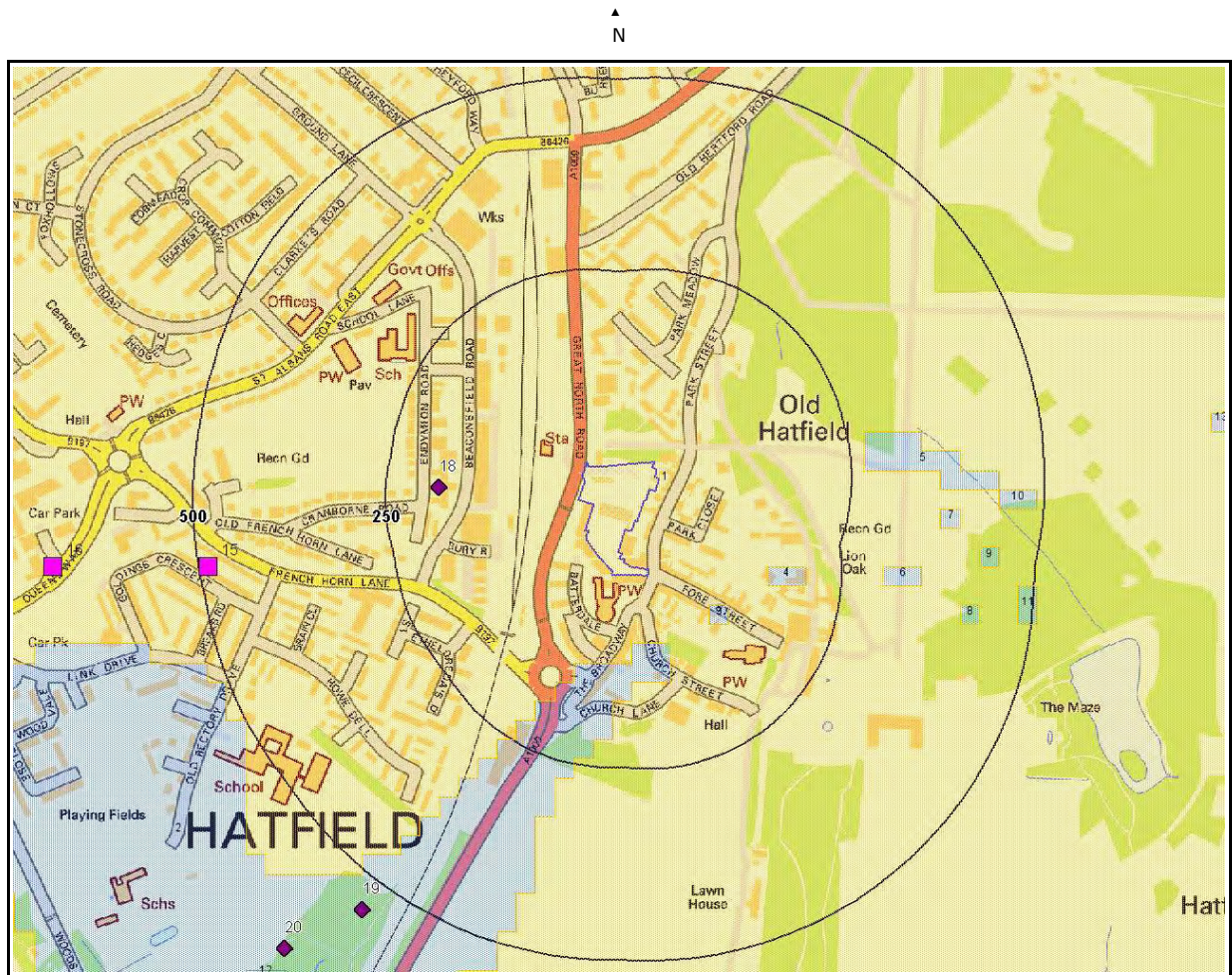
**Are there any BGS Current Ground Workings within 1000m of the study site boundary?** **Yes**

The following Current Ground Workings information is provided by British Geological Society:

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
----	--------------	-----------	-----	--------------------	----------	-----------------	--------

12	252.0	S	523360, 208335	Chalk	Hatfield House Chalk Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	699.0	S	523120, 207920	Chalk	Hatfield Park Chalk Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

### 3. Mining, Extraction & Natural Cavities Map



Mining, Extraction & Natural Cavities Legend



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## 3. Mining, Extraction & Natural Cavities

### 3.1 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.

### 3.2 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.

### 3.3 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. No results found.

### 3.4 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?** **Yes**

The following non-coal mining information is provided by the BGS:

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
1	0.0	On Site	Not given	Chalk	Unlikely - Some small scale mining may have occurred but restricted in extent.
2	87.0	S	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
3	87.0	SE	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
4	153.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.

Report Reference: [EMS-118389\\_155663](#)

5	265.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
6	303.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
7	367.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
8	406.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
9	424.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
10	440.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
11	478.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
12	666.0	SW	Not given	Chalk	Unlikely - Some small scale mining may have occurred but restricted in extent.
13	718.0	E	Not given	Chalk	Highly Unlikely - Localised small scale mining may have occurred but restricted in extent.
Not shown	879.0	SE	Not given	Chalk	Rare - Infrequent minor mining may have occurred but restricted in extent.

### 3.5 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? Yes**

The following Non-Coal Mining Cavities information provided by Peter Brett Associates:

ID	Distance (m)	Direction	NGR	Address	Superficial Deposits	Bedrock Deposits	Extracted Mineral
15	489.0	W	522800, 208600	Hatfield, B197 French Horn Lane/Goldings Crescent, Hertfordshire	Glacial Gravel Glacial Till	-	Chalk
16	687.0	W	522600, 208600	Hatfield, Queensway/K en Lane, Hertfordshire	Glacial Gravel Glacial Till	-	Chalk
Not shown	952.0	W	522400, 208300	'briar's Lane Mine' (2), Hatfield, Briar's Lane Primary School, Roe Green, Hertfordshire	Glacial Till	-	Chalk

### 3.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

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

Report Reference: [EMS-118389\\_155663](#)

The following Natural Cavities information provided by Peter Brett Associates:

ID	Distance (m)	Direction	NGR	Superficial Deposits	Bedrock Deposits	Cavity Type and Number
18	181.0	W	TL	Glacial sand	Upper Chalk Formation	Sinkhole x 1, Solution Pipe x 1
19	545.0	SW	TL	Glacial sand, Glacial Till and morainic drift	Upper Chalk Formation	Swallow Hole x 3
20	647.0	SW	TL	Glacial Till and morainic drift	Upper Chalk Formation	Swallow Hole x 1
Not shown	788.0	SW	TL	Glacial Sand & Gravel, Glacial Till and morainic drift	Upper Chalk Formation	Swallow Hole x 1

### 3.7 Brine Extraction

This dataset provides information from the Brine Compensation Board which has been discontinued and is now covered by the Coal Authority.

**Are there any Brine Extraction areas within 1000m of the study site boundary? No**

Database searched and no data found.

### 3.8 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.

### 3.9 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. More detailed information on potential Tin Mining may be found in Section 3.3 – Non-Coal Mining Hazards.

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

Database searched and no data found.

### 3.10 Clay Mining

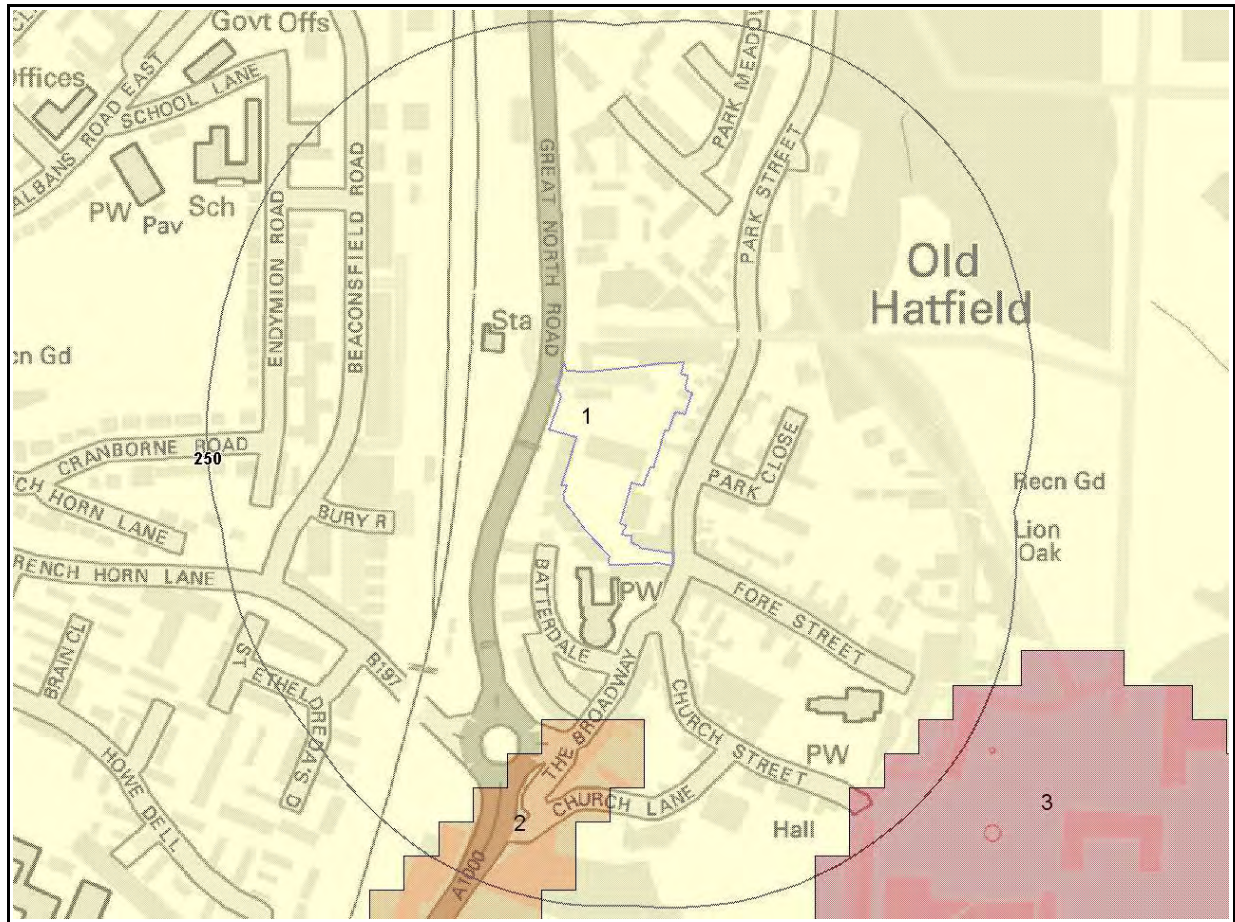
This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

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

Database searched and no data found.

# 4. Natural Ground Subsidence

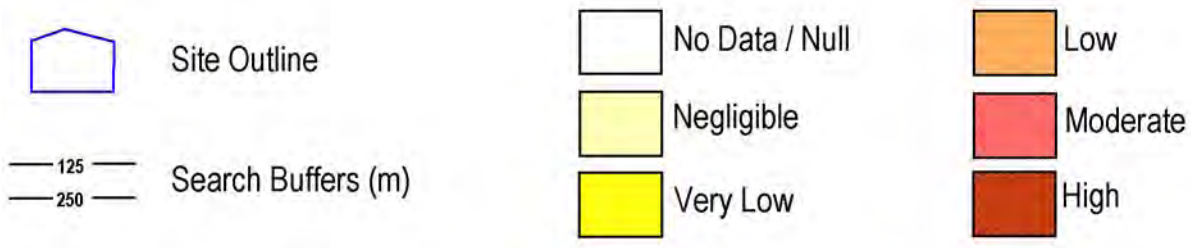
## 4.1 Shrink-Swell Clay Map



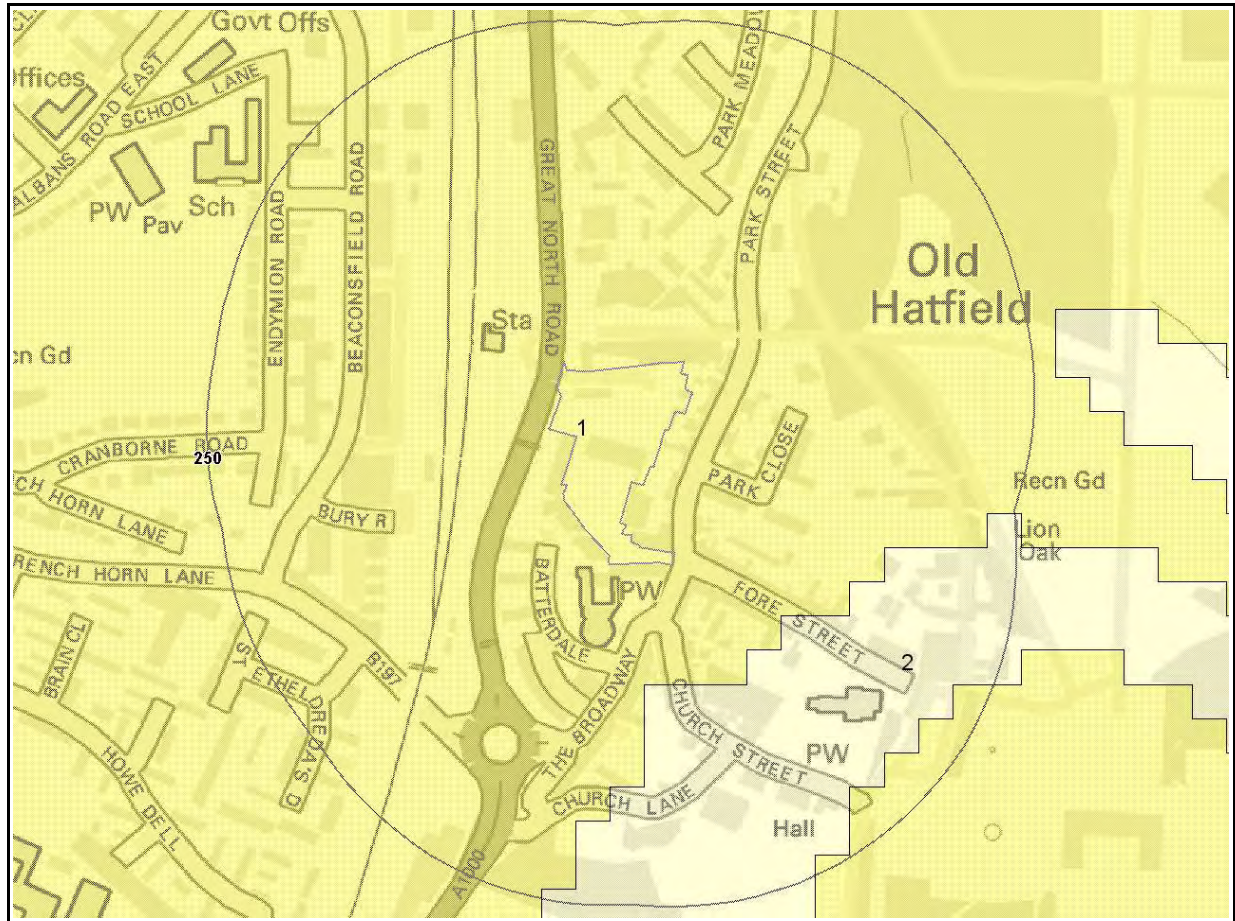
Shrink-Swell Clay Legend



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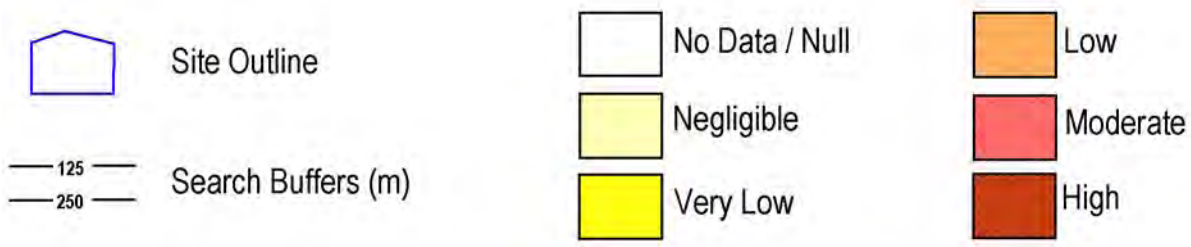
# 4.2 Landslides Map



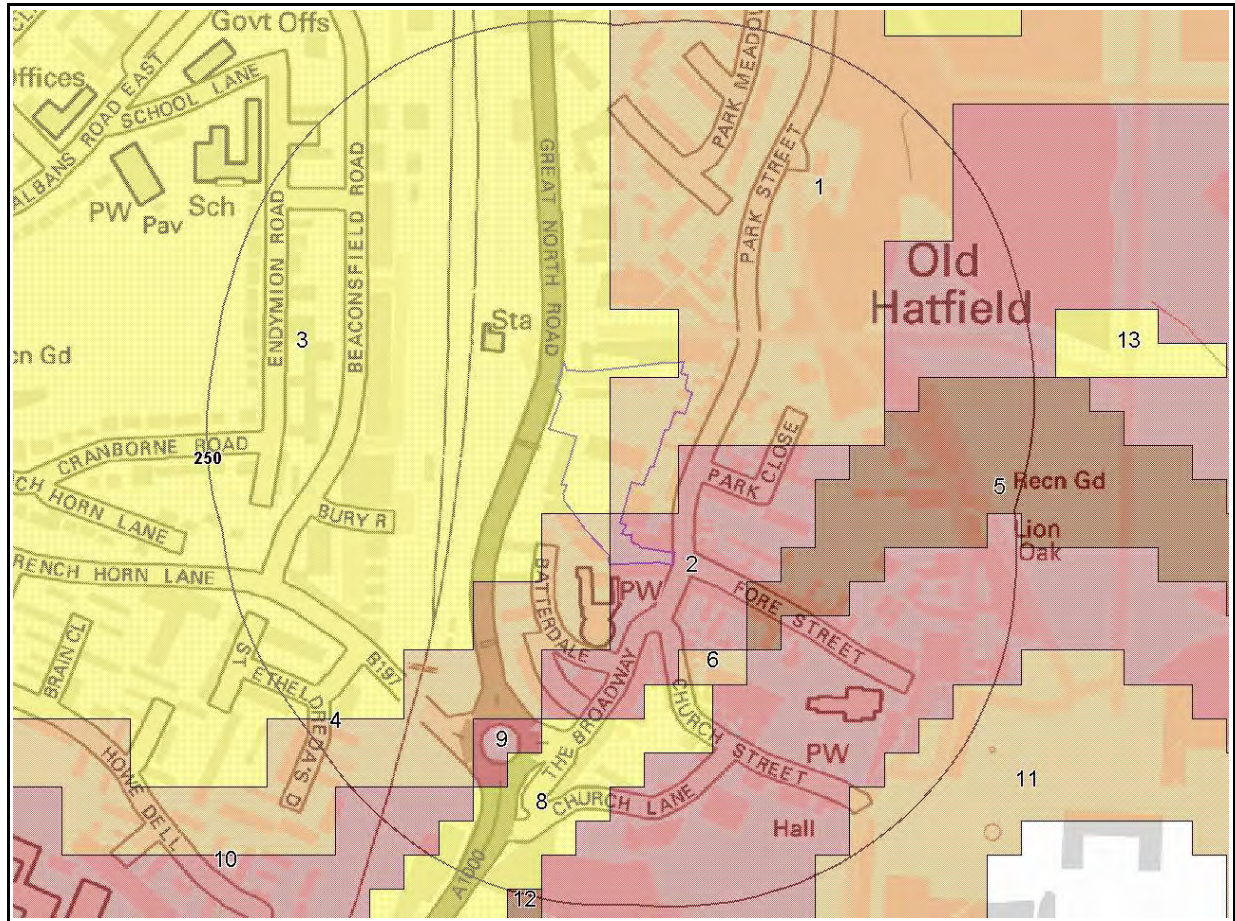
Landslides Legend



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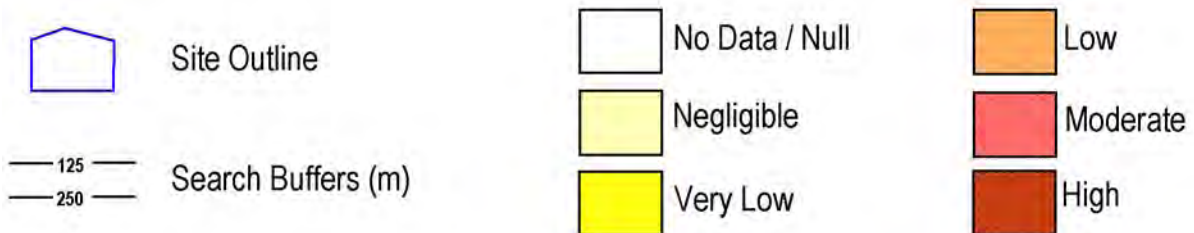
# 4.3 Ground Dissolution Soluble Rocks Map



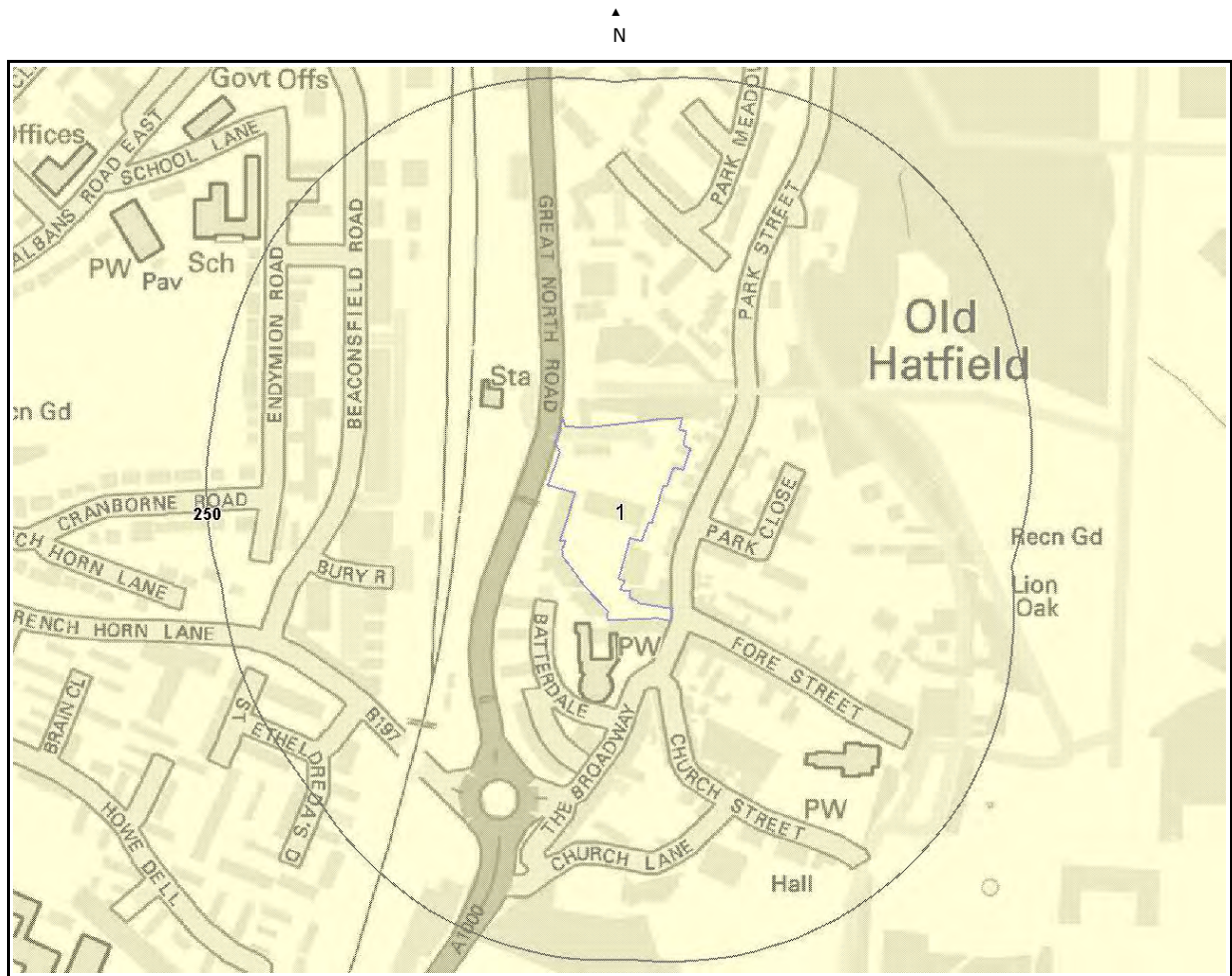
Ground Dissolution Soluble Rocks Legend



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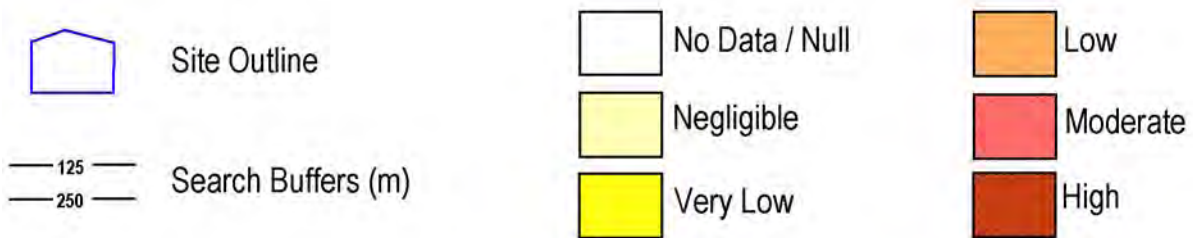
# 4.4 Compressible Deposits Map



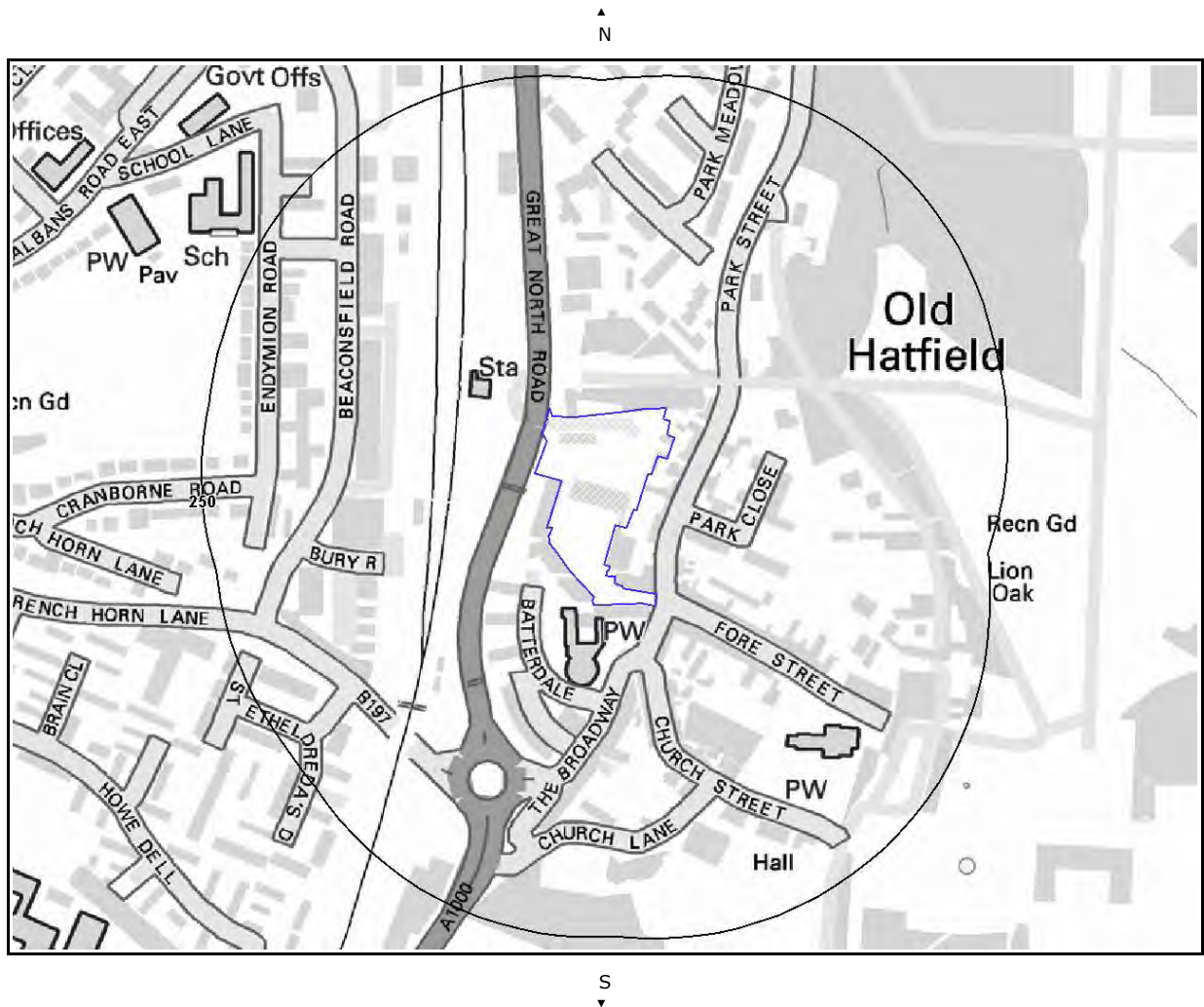
Compressible Deposits Legend



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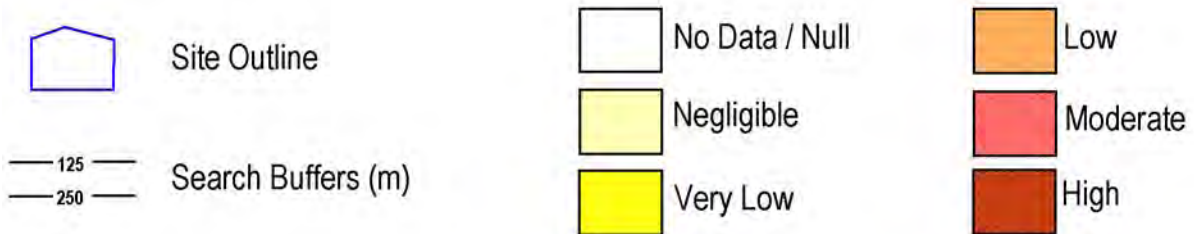
# 4.5 Collapsible Deposits Map



Collapsible Deposits Legend

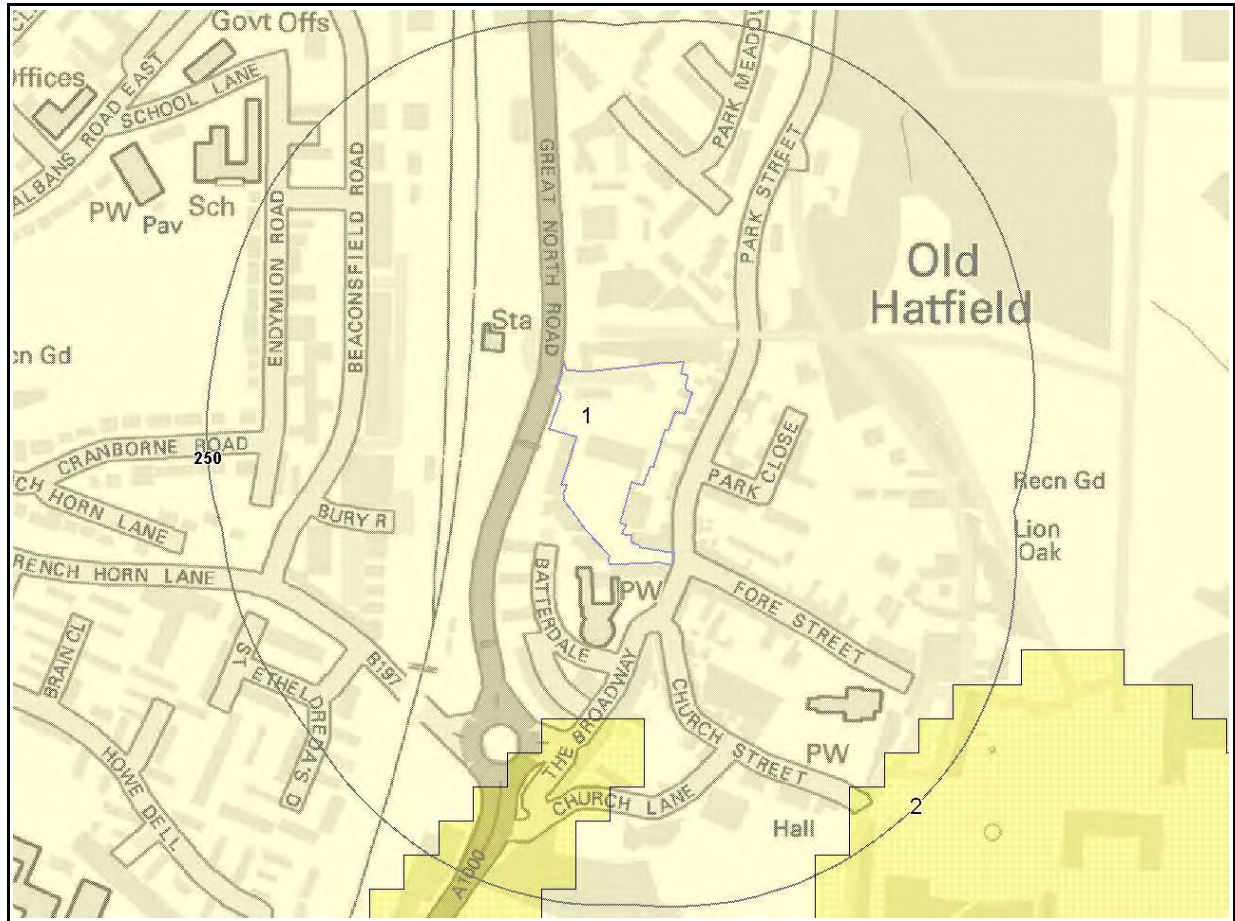


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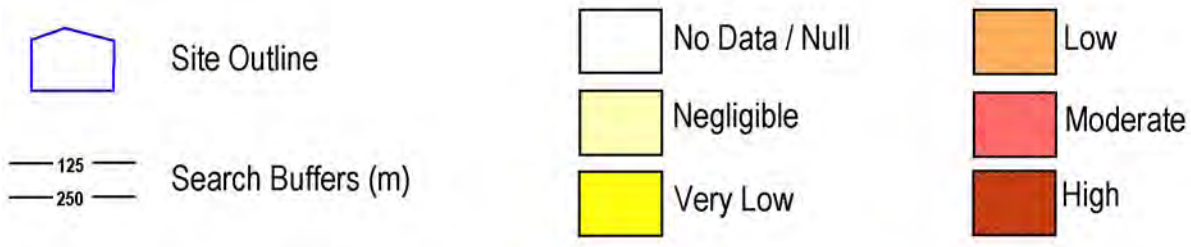
# 4.6 Running Sand Map



Running Sand Legend



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## 4. 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?      Moderate**

### 4.1 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.

### 4.2 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.

### 4.3 Ground Dissolution of Soluble Rocks

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

ID	Distance (m)*	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Very significant soluble rocks are present, with a moderate possibility of local natural subsidence due to high surface or subsurface water flow. Do not load the land or undertake building work before obtaining specialist advice. Do not dispose of drainage to the ground. Some possibility groundwater pollution. Maintain drainage infrastructure. For new build specialist site investigation and stability assessment may be necessary before construction. Construction work may cause subsidence. Increased construction costs are likely. For existing property probable increase in insurance risk due to soluble rocks.
2	0.0	On Site	Moderate	
3	0.0	On Site	Very Low	
4	0.0	On Site	Low	

### 4.4 Compressible Deposits

\*This includes an automatically generated 50m buffer zone around the study site boundary.

The following Compressible Ground 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.

## 4.5 Collapsible Deposits

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

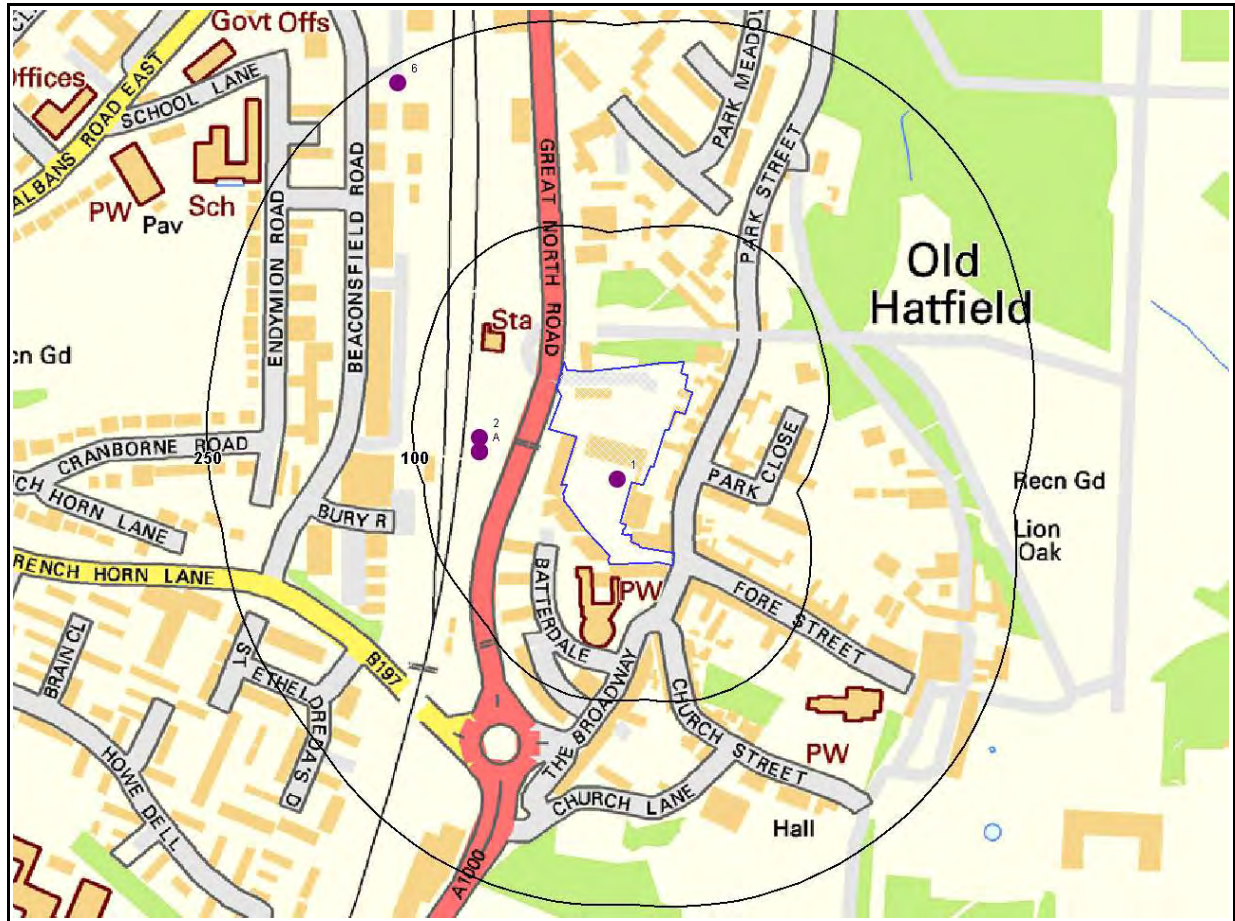
Distance (m)*	Direction	Hazard Rating	Details
0.0	On site	Null-Negligible	No Indicators for collapsible deposits identified. No Special actions required to avoid problems due to collapsible deposit.

## 4.6 Running Sands

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

ID	Distance (m)*	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for running sand identified. 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.

# 5. Borehole Records Map



Borehole Records Legend



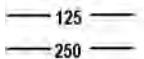
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Site Outline



Borehole Locations



Search Buffers (m)

## 5. 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:

6

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length (m)	Borehole Name
1	0.0	On Site	523330,208650	TL20NW40	6.09	BREWERY HATFIELD
2	51.0	W	523230,208680	TL20NW39	121.92	HATFIELD STATION
3A	54.0	W	523230,208670	TL20NW231	39.62	HATFIELD STATION
4A	54.0	W	523230,208670	TL20NW232	-1.0	HATFIELD STATION
5A	54.0	W	523230,208670	TL20NW233	36.58	HATFIELD STATION
6	238.0	NW	523170,208940	TL20NW257	25.0	CENTEC 3 HATFEILD 3

## 6. 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 GeoInsight User Guide, available on request.

Distance (m)*	Direction	Sample Type	Estimated Geometric Mean Soil Concentrations (mg/kg)				
			Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<150 mg/kg

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

## 7. Contacts

### EmapSite

Telephone: 0118 9736883  
sales@emapsite.com



### British Geological Survey Enquiries

Kingsley Dunham Centre  
Keyworth, Nottingham NG12 5GG  
Tel: 0115 936 3143. Fax: 0115 936 3276.  
Email: enquiries@bgs.ac.uk  
Web: www.bgs.ac.uk  
BGS Geological Hazards Reports and general geological enquiries



### British Gypsum

British Gypsum Ltd, East Leake, Loughborough, Leicestershire,  
LE12 6HX  
Tel: www.british-gypsum.com



### The Coal Authority

200 Lichfield Lane, Mansfield, Notts NG18 4RG  
Tel: 0845 762 6848  
DX 716176 Mansfield 5 www.coal.gov.uk



### Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane, Brierley Hill, West  
Midlands DY5 3LH  
Tel: +44 (0) 1384 262 000  
Email: enquiries.gs@jpb.co.uk  
Website: www.jpb.co.uk



### Ordnance Survey

Romsey Road, Southampton SO16 4GU  
Tel: 08456 050505



### Getmapping PLC

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



### Peter Brett Associates

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Berkshire RG1 8DN  
Tel: +44 (0)118 950 0761 E-mail: reading@pba.co.uk



### Acknowledgements

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"**Contract**" means the contract between GroundSure and the Client for the performance of the Services which arises upon GroundSure's acceptance of an Order or Commission and which shall incorporate these conditions, the relevant GroundSure User Guide, proposal by GroundSure and the content of any subsequent report, and any agreed amendments in accordance with clause 11.

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"**Order Website**" means online platform via which Orders may be placed.

"**Report**" means a Risk Screening Report or Data Report for commercial or residential property available from GroundSure relating to the Site prepared in accordance with the specifications set out in the relevant User Guide.

"**Residential**" means any building used as or suitable for use as an individual dwelling.

"**Risk Screening Report**" means one of GroundSure's risk screening reports, comprising factual data with interpretation in respect of the level of likely risk and/or liability, excluding "Consultancy Services".

"**Services**" means the provision of any Report, Mapping or Consultancy Services which GroundSure has agreed to carry out for the Client/Beneficiary on these terms and conditions in respect of the Site.

"**Site**" means the landsite in respect of which GroundSure provides the Services.

"**User Guide**" means the relevant current version of the user guide, available upon request from GroundSure.

### 2 Scope of Services

2.1 GroundSure agrees to carry out the Services in accordance with the Contract and to the extent set out therein.

2.2 GroundSure shall exercise all the reasonable skill, care and diligence to be expected of experienced environmental consultants in the performance of the Services.

2.3 The Client acknowledges that it has not relied on any statement or representation made by or on behalf of GroundSure which is not set out and expressly agreed in the Contract.

2.4 Terms and conditions appearing on a Client's order form, printed stationery or other communication, including invoices, to GroundSure, its employees, servants, agents or other representatives or any terms implied by custom, practice or course of dealing shall be of no effect and these terms and conditions shall prevail over all others.

2.5 In the event that a Client/Beneficiary opts to take out insurance in conjunction with or as a result of the Services, such insurance shall be subject solely to the terms of any policy issued to it in that respect and GroundSure will have no liability therefore.

2.6 GroundSure's quotations/proposals are valid for a period of 30 days only. GroundSure reserves the right to withdraw any quotation at any time before GroundSure accepts an Order or Commission. GroundSure's acceptance of an Order or Commission shall be effective only where such acceptance is in writing and signed by GroundSure's authorised representative or where accepted via GroundSure's Order Website.

### 3 The Client's obligations

3.1 The Client shall ensure the Beneficiary complies with and is bound by the terms and conditions set out in the Contract and shall provide that GroundSure may in its own right enforce such terms and conditions against the Beneficiary pursuant to the Contracts (Rights of Third Parties) Act 1999. The Client shall be liable for all breaches of the Contract by the Beneficiary as if they were breaches by the Client. The Client shall be solely responsible for ensuring that the Report/Mapping ordered is appropriate and suitable for the Beneficiary's needs.

3.2 The Client shall (or shall procure that the Beneficiary shall) supply to GroundSure as soon as practicable and without charge all information necessary and accurate relevant data including any specific and/or unusual environmental information relating to the Site known to the Client/Beneficiary which may pertain to the Services and shall give such assistance as GroundSure shall reasonably require in the performance of the Services (including, without limitation, access to a Site, facilities and equipment as agreed in the Contract).

3.3 Where Client/Beneficiary approval or decision is required, such approval or decision shall be given or procured in reasonable time as not to delay or disrupt the performance of any other part of the Services.

3.4 The Client shall not and shall not knowingly permit the Beneficiary to, save as expressly permitted by these terms and conditions, re-sell, alter, add to, amend or use out of context the content of any Report, Mapping or, in respect of any Services, information given by GroundSure. For the avoidance of doubt, the Client and Beneficiary may make the Report, Mapping or GroundSure's findings available to a third party who is considering acquiring the whole or part of the Site, or providing funding in relation to the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.5 The Client is responsible for maintaining the confidentiality of its user name and password if using GroundSure's internet ordering service and accepts responsibility for all activity that occurs under such account and password.

### 4 Reliance

4.1 Upon full payment of all relevant fees and subject to the provisions of these terms and conditions, the Client and Beneficiary are granted an irrevocable royalty-free licence to access the information contained in a Report, Mapping or in a report prepared by GroundSure in respect of or arising out of Consultancy Services. The Services may only be used for the benefit of the Client and those persons listed in clauses 4.2 and 4.3.

4.2 In relation to Data Reports, Mapping and Risk Screening Reports, the Client shall be entitled to make Reports available to (i) the Beneficiary, (ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate), (iv) the first purchaser or first tenant of the Site (v) the professional advisers and lenders of the first purchaser or tenant of the Site. Accordingly GroundSure shall have the same duties and obligations to those persons in respect of the Services as it has to the Client and those persons shall have the benefit of any of the Client's rights under the Contract as if those persons were parties to the Contract. For the avoidance of doubt, the limitations of GroundSure's liability as set out in clauses 7 and 11.6 shall apply.

4.3 In relation to Consultancy Services, reliance shall be limited to the Client, Beneficiary and named parties on the Report.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise agreed in writing with GroundSure, any other party considering the information supplied by GroundSure as part of the Services, including (but not limited to) insurance underwriters, does so at their own risk and GroundSure has no legal obligations to such party unless otherwise agreed in writing.

4.5 The Client shall not and shall not knowingly permit any person (including the Beneficiary) who is provided with a copy of any Report, (except as permitted herein or by separate agreement with GroundSure) to: (a) remove, suppress or modify any trade mark, copyright or other proprietary marking from the Report or Mapping; (b) create any product which is derived directly or indirectly from the data contained in the Report or Mapping; (c) combine the Report or Mapping with, or incorporate the Report or Mapping into any other information data or service; or (d) re-format or otherwise change (whether by modification, addition or enhancement) data or images contained in the Report or Mapping.

4.6 Notwithstanding clause 4.5, if the Client acts in a professional capacity, it may make reasonable use of a Report and/or findings made as a result of Consultancy Services to advise Beneficiaries. However, GroundSure shall have no liability in respect of any opinion or report given to such Beneficiaries by the Client or a third party.

### 5 Fees and Disbursements

5.1 GroundSure shall charge the Client fees at the rate and frequency specified in the Contract together, in the case of Consultancy Services, with all proper disbursements incurred by GroundSure in performing the Services. For the avoidance of doubt, the fees payable for the Services are as set out in GroundSure's written proposal, Order Website or Order acknowledgement form. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services.

5.2 Unless GroundSure requires prepayment, the Client shall promptly pay all fees disbursements and other monies due to GroundSure in full without deduction, counterclaim or set off together with such value added tax or other tax as may be required within 30 days from the date of GroundSure's invoice or such other period as may be agreed in writing between GroundSure and the Client ("**Payment Date**"). GroundSure reserves the right to charge interest which shall accrue on a daily basis from 30 days after the date of Payment Date until the date of payment (whether before or after judgment) at the rate of five per cent per annum above the Bank of England base rate from time to time.

5.3 In the event that the Client disputes the amount payable in respect of GroundSure's invoice it shall notify GroundSure no later than 28 days after the date thereof that it is in dispute. In default of such notification the Client shall be deemed to have agreed the amount thereof. As soon as reasonably practicable following receipt of a notification in respect of any disputed invoice, a member of the management team at GroundSure shall contact the Client and the parties shall use all reasonable endeavours to resolve the dispute.

### 6 Intellectual Property

6.1 Subject to the provisions of clause 4.1, the Client and the Beneficiary hereby acknowledge that all Intellectual Property in the Services and Content are and shall remain owned by either GroundSure or the Data Providers and nothing in these terms purports to transfer or assign any rights to the Client or the Beneficiary in respect of the Intellectual Property.

6.2 The Client shall acknowledge the ownership of the Content where such Content is incorporated or used in the Client's own documents, reports, systems or services whether or not these are supplied to a third party.

6.3 Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client acknowledges that the proprietary rights subsisting in copyright, database rights and any other intellectual property rights in respect of any data and information contained in any Report are and shall remain (subject to clause 11.1) the property of GroundSure and/or any third party that has supplied data or information used to create a Report, and that these conditions do not purport to grant, assign or transfer any such rights in respect thereof to a Client and/or a Beneficiary.

6.5 The Client and each of the parties set out in clause 4.2 are permitted to make up to 8 (commercial) or 2 (residential) printed copies of the Report only. Further copies of the Report may not be made in whole or in part without the prior written permission of GroundSure who shall be entitled to make a charge for each additional copy.

6.6 The Client shall (and shall procure that any recipients of the Report as permitted under clause 4.2 shall):

(i) not remove, suppress or modify any trademark, copyright or other proprietary marking belonging to GroundSure or any third party from the Services;

(ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;

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(iii) not create any product or report which is derived directly or indirectly from the data contained in the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);

(iv) not combine the Services with or incorporate such Services into any other information data or service; and

(v) not reformat or otherwise change (whether by modification, addition or enhancement), data contained in the Services (save that those acting in a professional capacity to the Beneficiary shall not be in breach of this clause 6.6(v) where such reformatting is in the normal course of providing advice based upon the Services), in each case of parts (iii) to (v) inclusive, whether or not such product or report is produced for commercial profit or not.

6.7 The Client and/or Beneficiary shall and shall procure that any party to whom the Services are made available shall notify GroundSure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

#### **7. Liability**

7.1 Nothing in these terms and conditions shall limit GroundSure's liability for causing death or personal injury through negligence or willful default.

7.2 Save as otherwise set out in these conditions, any information provided by one party ("**Disclosing Party**") to the other party ("**Receiving Party**") shall be treated as confidential except so far as authorised by the Disclosing Party to provide such information in whole or in part to a third party.

7.3 Nothing in these conditions shall affect the statutory rights of a consumer under the applicable consumer protection legislation from time to time.

7.4 In relation to Data Reports, Mapping and Risk Screening Reports, GroundSure's liability under the Contract shall cease upon the expiry of six years from the date when the Beneficiary became aware that it may have a claim against GroundSure in respect of the Services provided always that there shall be no liability at the expiration of twelve years from the completion of the Contract. For the avoidance of doubt, any claims in respect of which proceedings are notified to GroundSure in writing prior to the expiry of the time periods referred to in this clause shall survive the expiry of those time periods provided any such claim is actually commenced within six months of notification.

7.5 In relation to Consultancy Services GroundSure's liability under the Contract shall cease upon the expiry of six years from the date the Services were completed.

7.6 GroundSure shall not be liable to the Client or any person to whom the Client provides a copy of a Data Report, Mapping or Risk Screening Report in any circumstances whatsoever unless arising out of a breach on its part of the obligations set out in the Contract.

7.7 GroundSure shall not be liable if the Data Reports, Mapping or Risk Screening Report are used otherwise than as provided or referred to in these conditions and the relevant User Guide.

7.8 Subject to the provisions of clause 7.3, GroundSure makes no representation, warranties, express or implied, as to the accuracy, reliability, completeness, validity or fitness for purpose of any Content and shall not be liable for any omission, error or inaccuracy in relation thereto unless GroundSure should reasonably have been alerted to any omission, error or inaccuracy in the Content.

7.9 Subject to the provisions of clause 7.1 and irrespective of whether multiple parties make use of the same Services the total liability of GroundSure under or in connection with the Contract, whether in contract in tort for breach of statutory duty or otherwise shall not exceed £10 million per claim or series of connected claims,

7.10 Whilst GroundSure will use all reasonable endeavours to maintain operability of its internet ordering service it will not be liable for any loss or damages caused by a delay or loss of use of such service. The Client shall use GroundSure's internet ordering service at its own risk. GroundSure shall not be responsible for any damage to a Client or permitted assignee's computer, software, modem, telephone or other property resulting from the use of GroundSure's internet ordering service.

7.11 The Client accepts, and shall use all reasonable endeavours to procure that anyone who is provided with a copy of the Report accepts, that it has no claim or recourse to any Data Provider or to GroundSure in respect of the acts or omissions of such Data Providers including Content supplied by them.

7.12 GroundSure shall provide the Services using reasonable skill and care, however, GroundSure shall not be liable for any inaccurate statement or risk rating in a Report which resulted from a reasonable interpretation of the Content.

7.13 Subject to clause 7.1, GroundSure shall not be liable to the Client, the Beneficiary or any third party in contract, tort (including, without limitation, negligence) or for misrepresentation or breach of statutory duty or otherwise in respect of any loss of profits, goodwill, revenue or opportunity, or any indirect or consequential loss (even if such loss was reasonably foreseeable).

7.14 GroundSure undertakes for the duration of the liability periods referred to in clauses 7.4 and 7.5 to maintain professional indemnity insurance in respect of its liabilities under this Contract. GroundSure shall produce evidence of such insurance if requested by the Client. A greater level of cover may be available upon request and agreement with the Client.

#### **8. GroundSure right to suspend or terminate**

8.1 In the event that GroundSure reasonably believes that the Client or Beneficiary as applicable has not provided the information or assistance required to enable the proper performance of the Services, GroundSure shall be entitled on fourteen days written notice to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 GroundSure may additionally terminate the Contract immediately on written notice in the event that:

(i) the Client shall fail to pay any sum due to GroundSure within 28 days of the Payment Date; or

(ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an Administration Order made against it or if a Receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or

(iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

(iv) the Client or the Beneficiary breaches any material term of the Contract (including, but not limited to, the obligations in clause 4) incapable of remedy or if remediable, is not remedied within 14 days of notice of the breach.

#### **9. Client's Right to Terminate and Suspend**

9.1 Subject to clause 10.2, the Client may at any time after commencement of the Services by notice in writing to GroundSure require GroundSure to terminate or suspend immediately performance of all or any of the Services.

9.2 The Client waives all and any right of cancellation it may have under the Consumer Protection (Distance Selling) Regulations 2000 (as amended) in respect of the Order of a Report/Mapping. This does not affect the Beneficiary's statutory rights.

#### **10. Consequences of Withdrawal, Termination or Suspension**

10.1 Upon termination or any suspension of the Services, GroundSure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client/Beneficiary any property of the Client/ Beneficiary in GroundSure's possession or control.

10.2 In the event of termination/suspension of the Contract under clauses 8 or 9, the Client shall pay to GroundSure all and any fees payable in respect of the performance of the Services up to the date of termination/suspension. In respect of any Consultancy Services provided, the Client shall also pay GroundSure any additional costs incurred in relation to the termination/suspension of the Contract.

#### **11. General**

11.1 The mapping contained in the Services is protected by Crown copyright and must not be used for any purpose outside the context of the Services or as specifically provided in these terms.

11.2 GroundSure reserves the right to amend these terms and conditions. No variation to these terms shall be valid unless signed by an authorised representative of GroundSure.

11.3 No failure on the part of GroundSure to exercise and no delay in exercising, any right, power or provision under these terms and conditions shall operate as a waiver thereof.

11.4 Save as expressly provided in clauses 4.2, 4.3, 6.3 and 11.5, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

11.5 The Secretary of State for Communities and Local Government acting through Ordnance Survey may enforce breach of clause 6.1 of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

11.6 GroundSure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

(i) the Client or Beneficiary's failure to provide facilities, access or information;

(ii) fire, storm, flood, tempest or epidemic;

(iii) Acts of God or the public enemy;

(iv) riot, civil commotion or war;

(v) strikes, labour disputes or industrial action;

(vi) acts or regulations of any governmental or other agency;

(vii) suspension or delay of services at public registries by Data Providers; or

(viii) changes in law.

11.7 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

11.8 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email and on the second working day after the day of posting if sent by first class post.

11.9 The Contract constitutes the entire contract between the parties and shall supersede all previous arrangements between the parties.

11.10 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

11.11 These terms and conditions shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with these terms and conditions shall be subject to the exclusive jurisdiction of the English courts.

11.12 If the Client or Beneficiary has a complaint about the Services, notice can be given in any format eg writing, phone, email to the Compliance Officer at GroundSure who will respond in a timely manner.

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### Site Details:

Salisbury Square, Old Hatfield, Hatfield

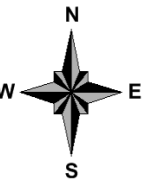
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Report Ref: EMS-118389\_155662  
Grid Ref: 523329, 208659

Map Name: MasterMap

Map date: 2010

Scale: 1:2,500

Printed at: 1:2,500



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## Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

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Report Ref: EMS-118389\_155662

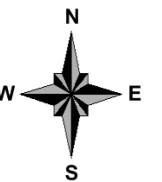
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Map Name: National Grid

Map date: 1995

Scale: 1:1,250

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Surveyed 1995  
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Edition N/A  
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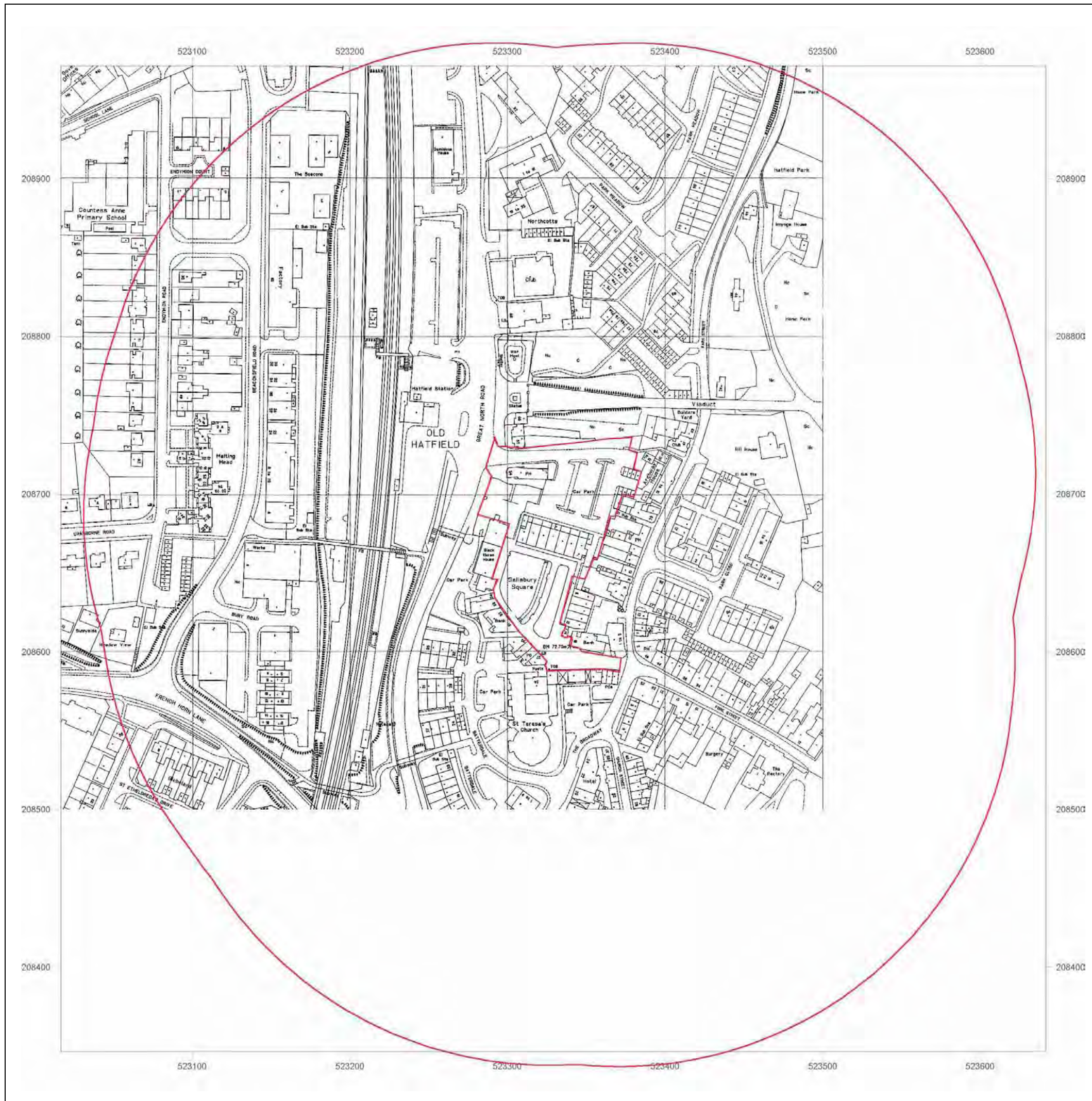


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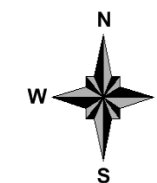
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Surveved N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A	Surveved N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A
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## Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

Client Ref: EMS\_118389\_155662

Report Ref: EMS-118389\_155662

Grid Ref: 523329, 208659

Map Name: National Grid

Map date: 1982-1985

Scale: 1:1,250

Printed at: 1:2,500



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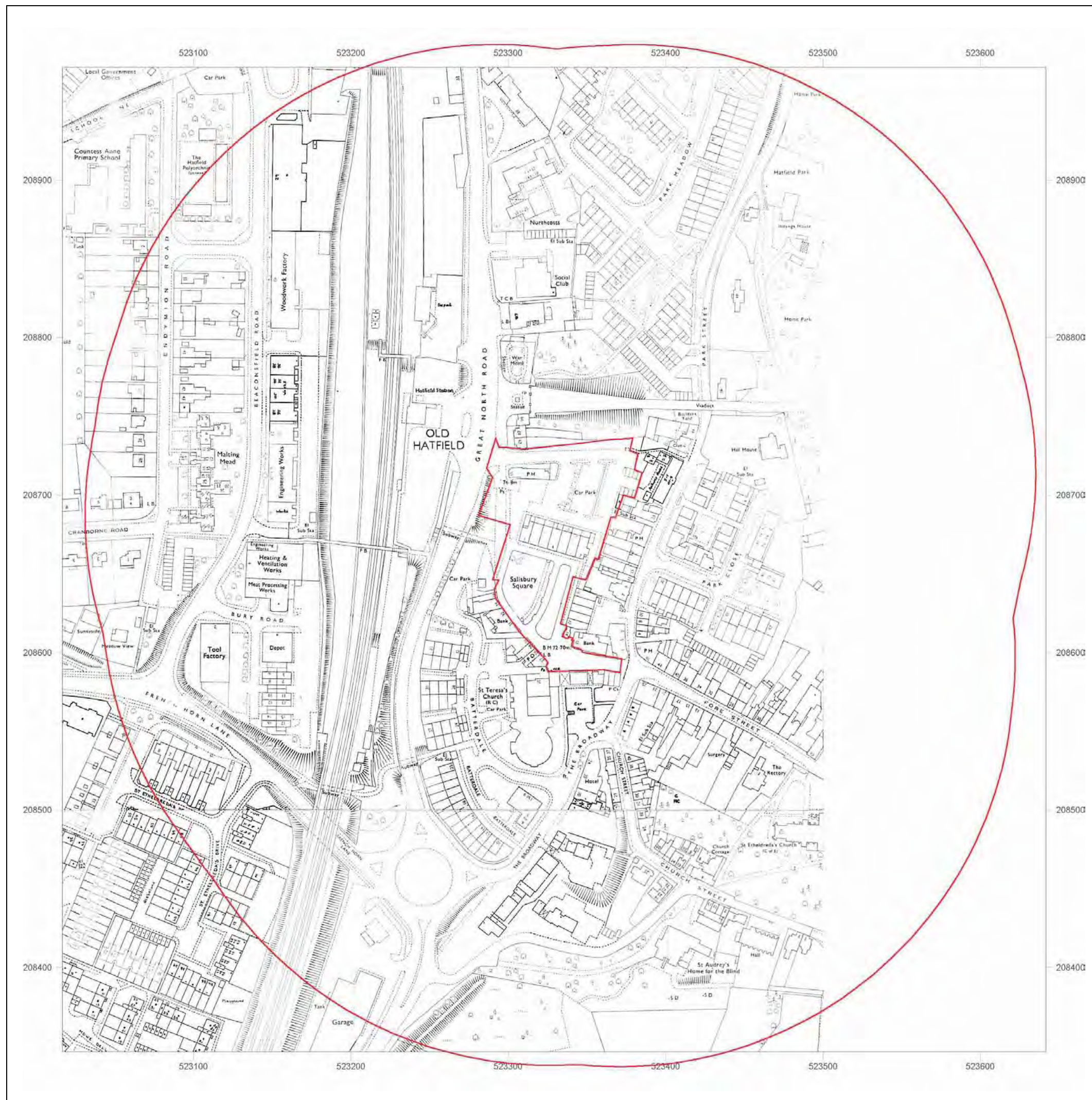


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## Site Details:

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Hatfield, Hatfield

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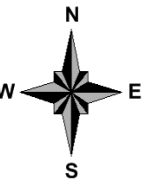
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Revised 1983  
Edition N/A  
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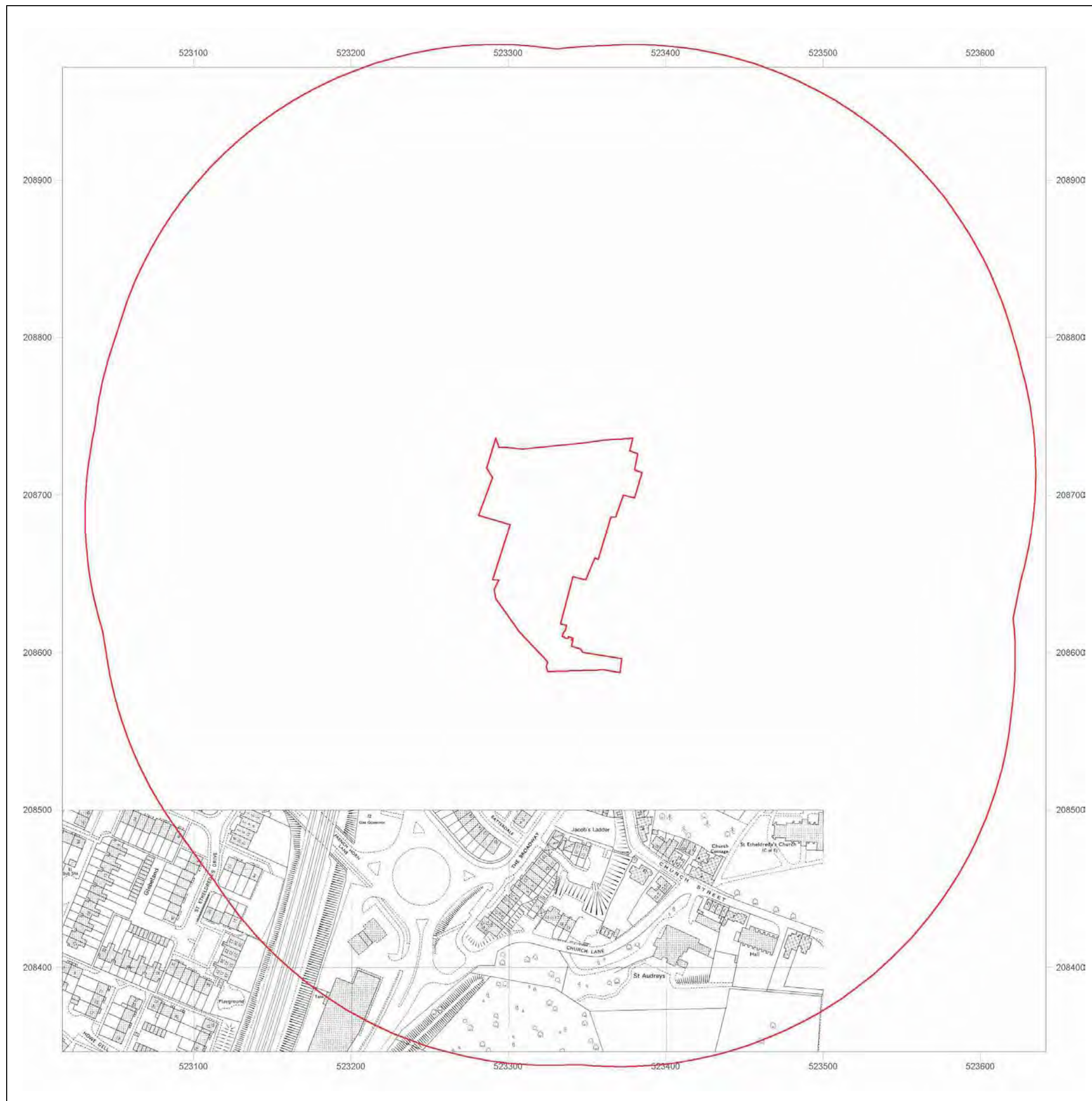


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**Site Details:**

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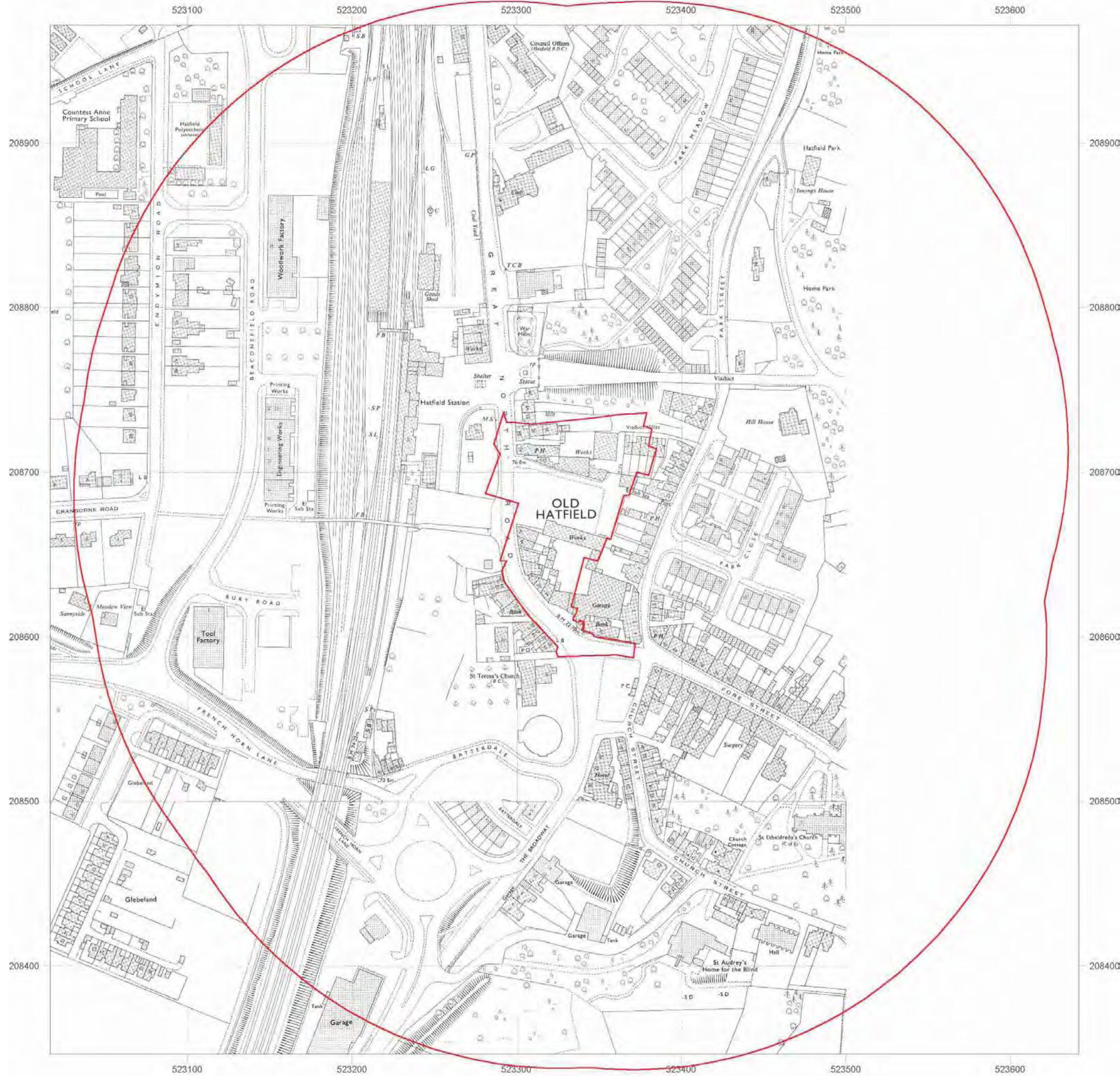
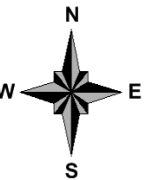
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Map date: 1970-1974

Scale: 1:1,250

Printed at: 1:2,500



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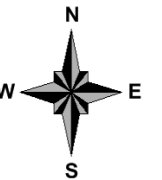
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**Scale:** 1:2,500

**Printed at:** 1:2,500



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 Revised 1969  
 Edition N/A  
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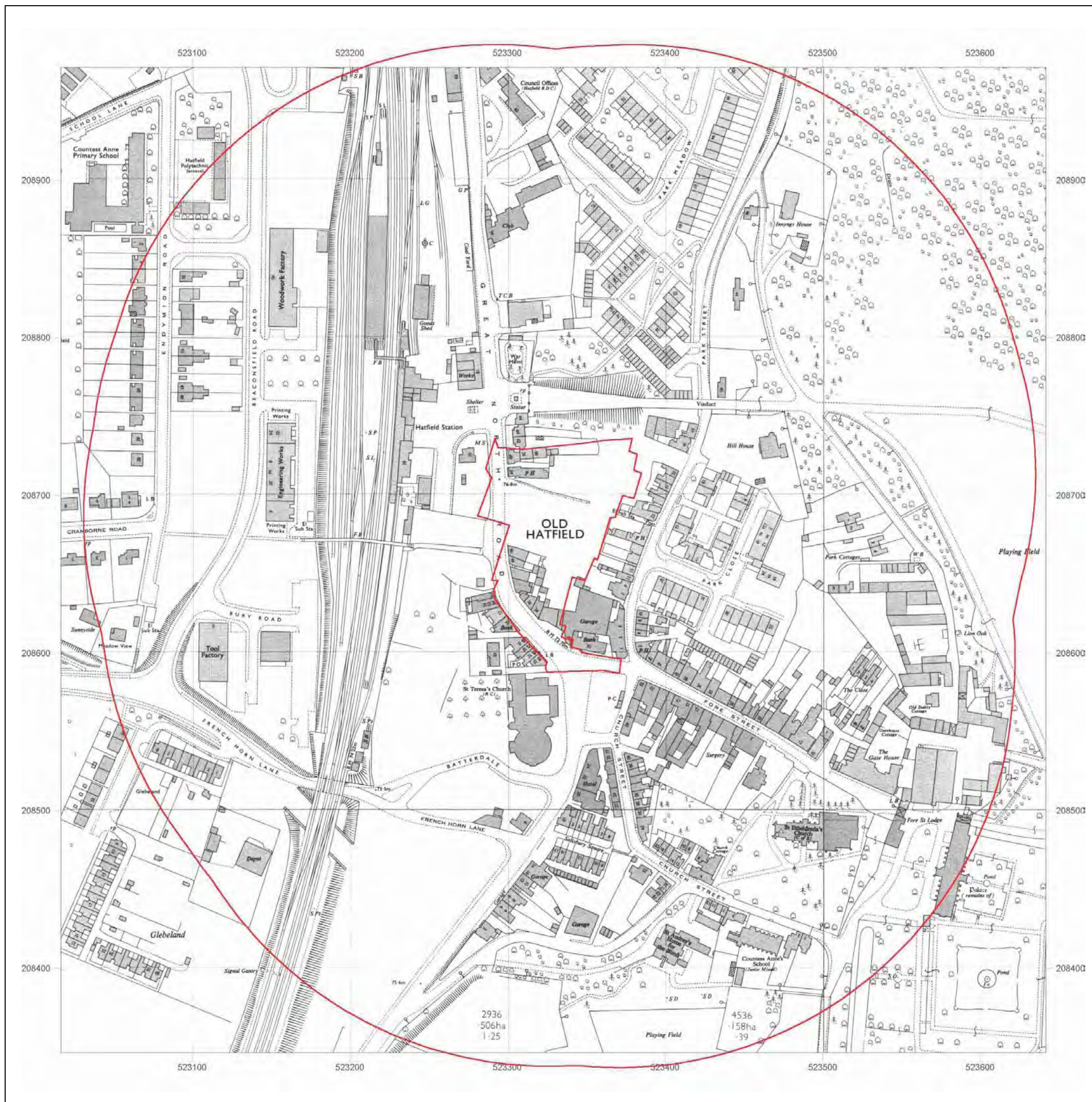


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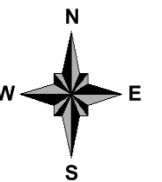
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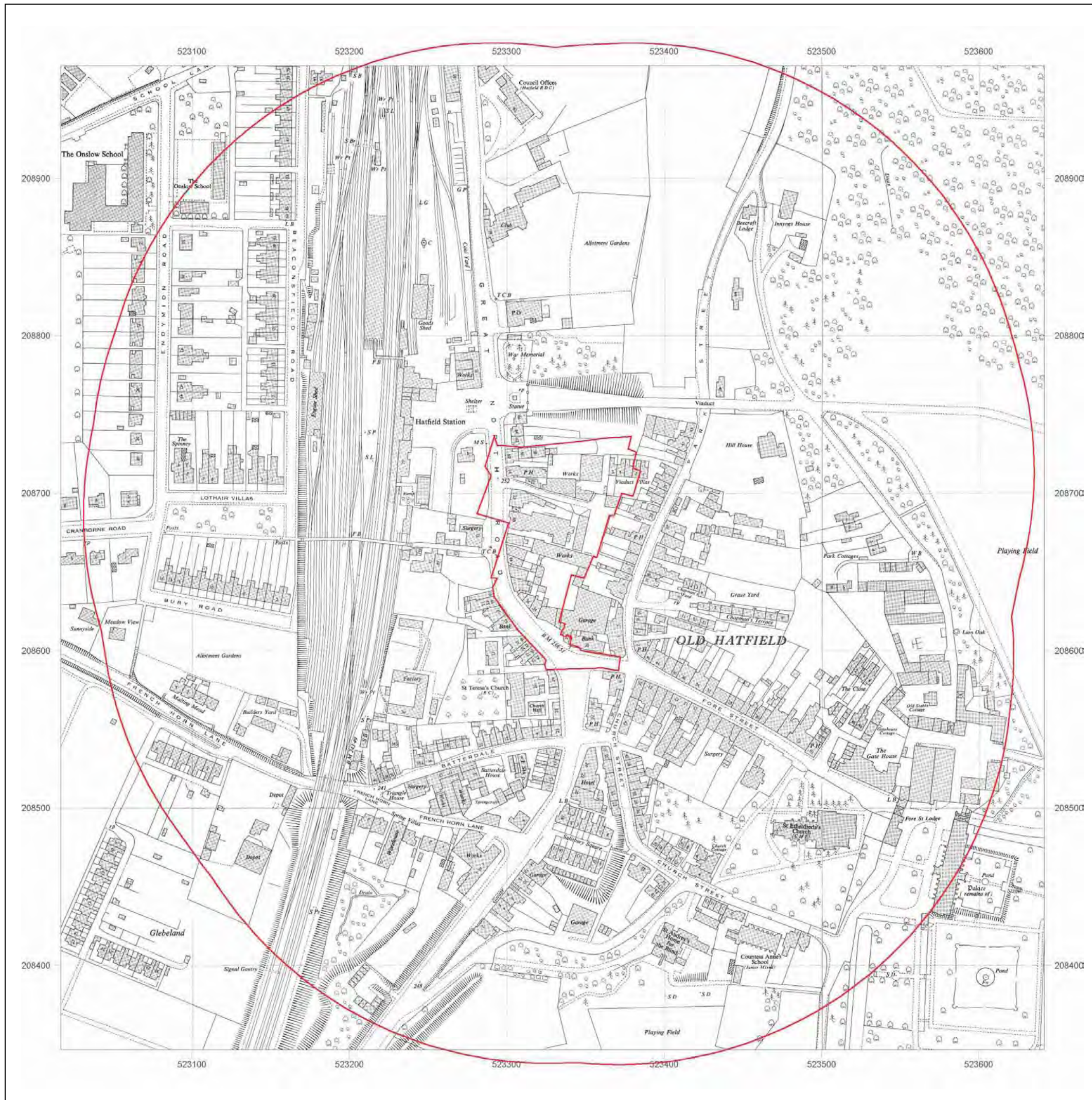
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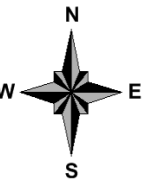
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Map Name: National Grid

Map date: 1960

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1980  
Edition 1982  
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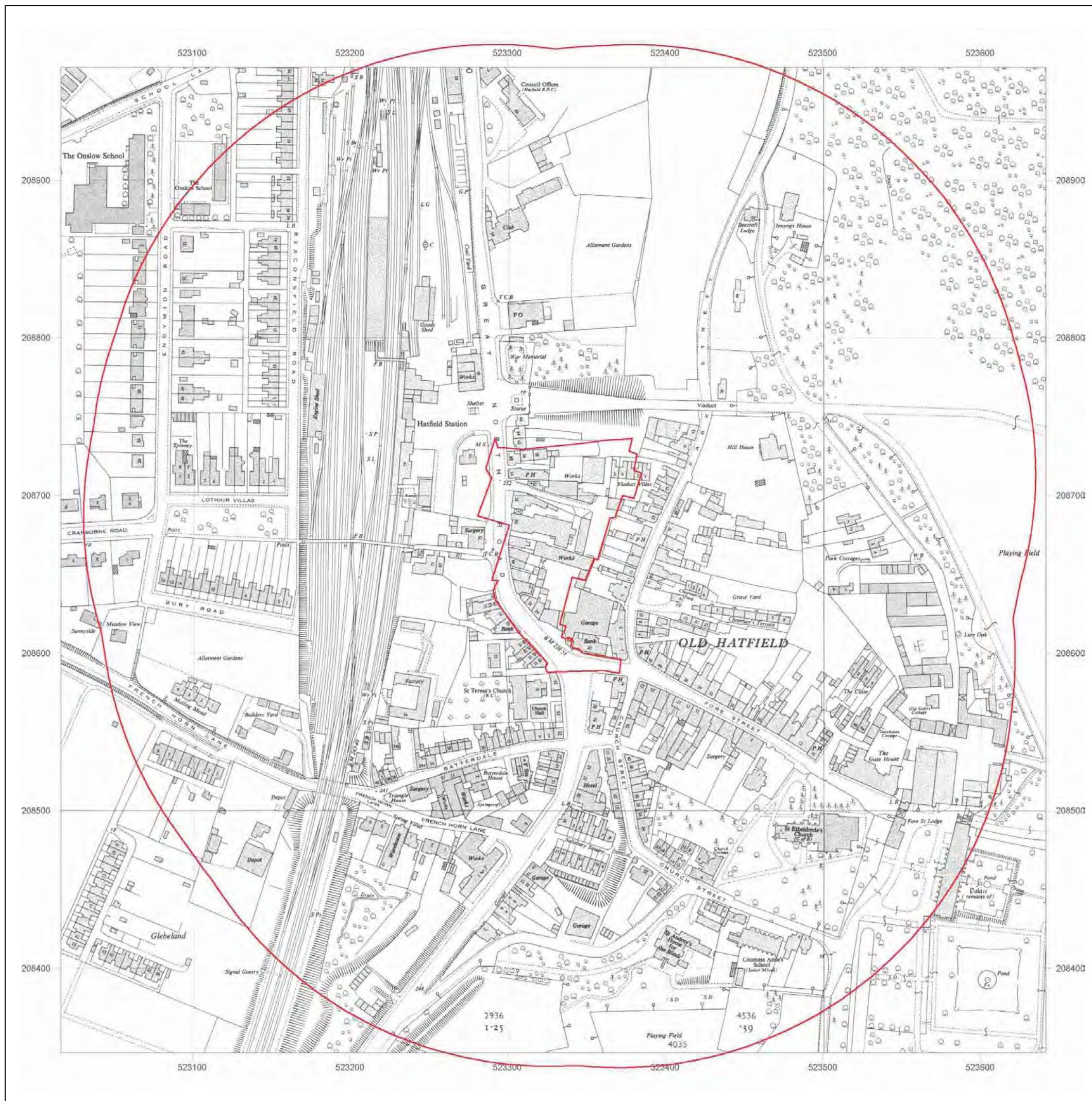


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Production date: 12 January 2011

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## Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

Client Ref: EMS\_118389\_155662

Report Ref: EMS-118389\_155662

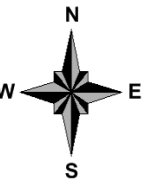
Grid Ref: 523329, 208659

Map Name: County Series

Map date: 1937

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1937  
Revised 1937  
Edition NA  
Copyright NA  
Levelled NA



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**Site Details:**

Salisbury Square, Old Hatfield, Hatfield

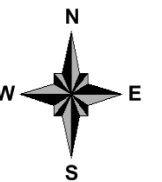
**Client Ref:** EMS\_118389\_155662  
**Report Ref:** EMS-118389\_155662  
**Grid Ref:** 523329, 208659

**Map Name:** County Series

**Map date:** 1934

**Scale:** 1:2,500

**Printed at:** 1:2,500



Surveyed 1934  
 Revised 1934  
 Edition NA  
 Copyright NA  
 Levelled NA



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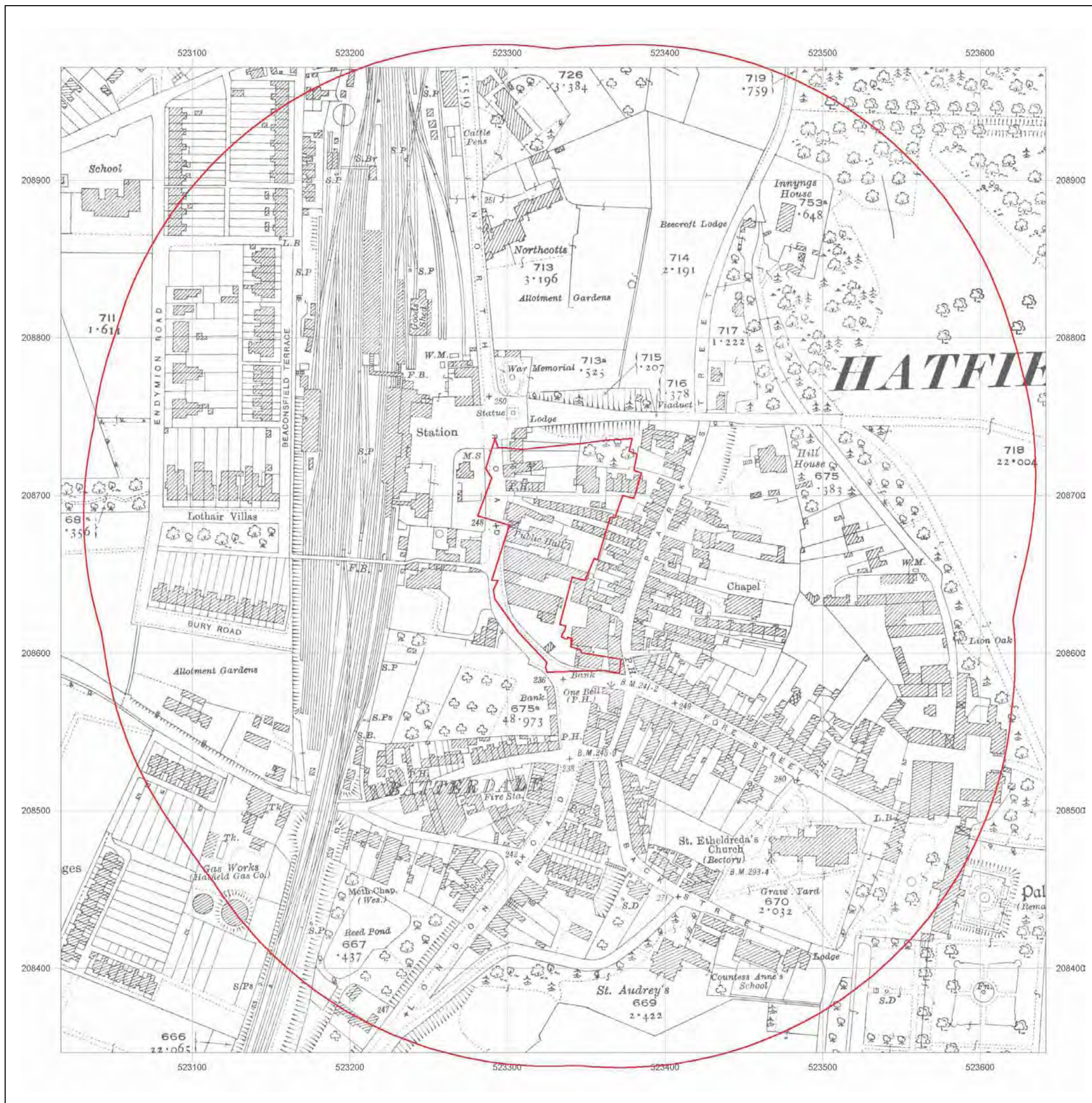


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**Site Details:**

Salisbury Square, Old Hatfield, Hatfield

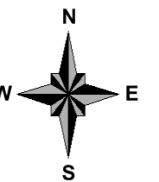
Client Ref: EMS\_118389\_155662  
 Report Ref: EMS-118389\_155662  
 Grid Ref: 523329, 208659

Map Name: County Series

Map date: 1922

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1922  
 Revised 1922  
 Edition NA  
 Copyright NA  
 Levelled NA



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Production date: 12 January 2011

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**Site Details:**

Salisbury Square, Old  
Hatfield, Hatfield

**Client Ref:** EMS\_118389\_155662  
**Report Ref:** EMS-118389\_155662  
**Grid Ref:** 523329, 208659

**Map Name:** County Series

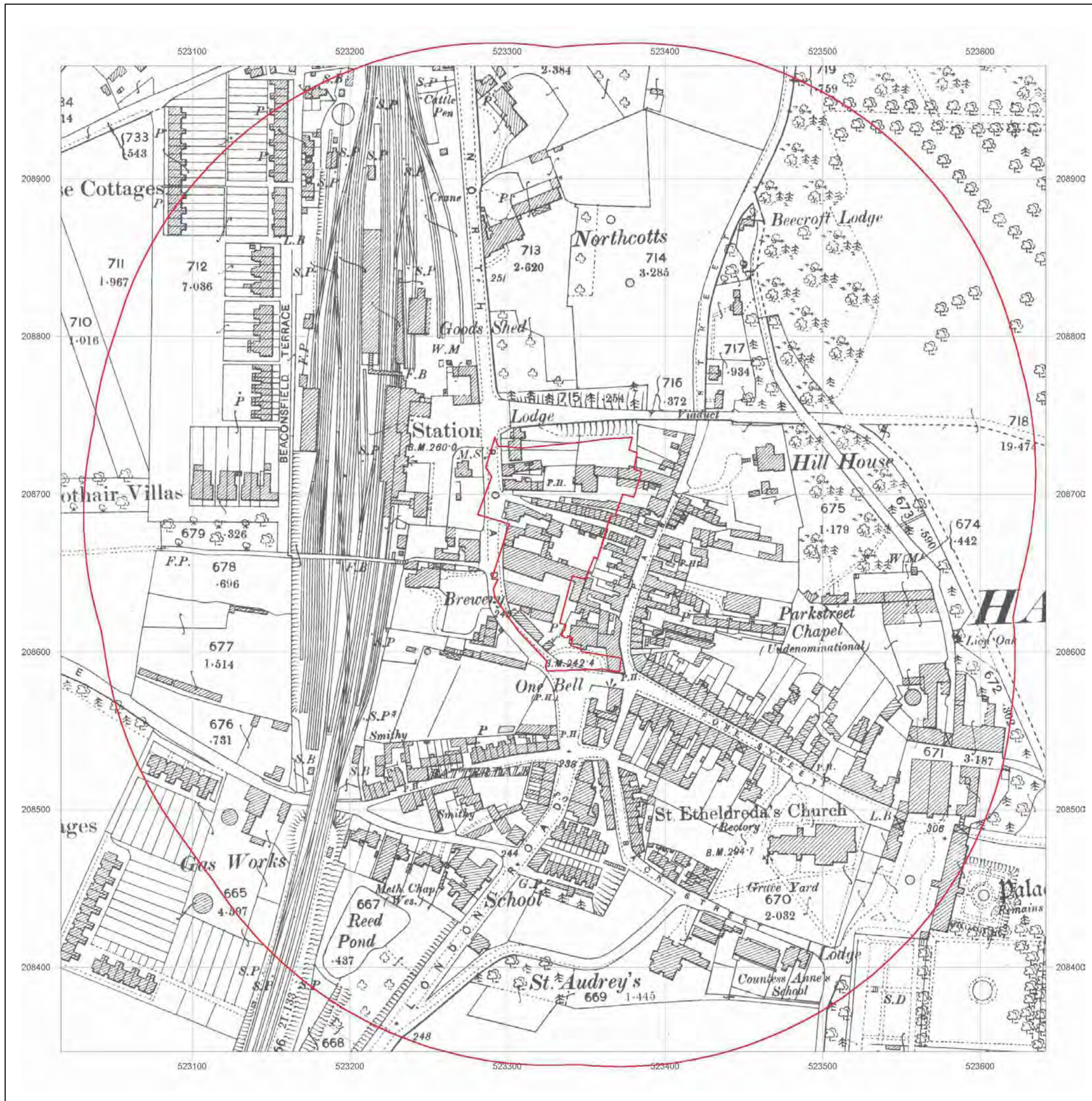
**Map date:** 1898

**Scale:** 1:2,500

**Printed at:** 1:2,500



Surveyed 1898  
Revised 1898  
Edition NA  
Copyright NA  
Levelled NA



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## Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

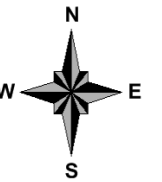
Client Ref: EMS\_118389\_155662  
Report Ref: EMS-118389\_155662  
Grid Ref: 523329, 208659

Map Name: County Series

Map date: 1879

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1879  
Revised 1879  
Edition NA  
Copyright NA  
Levelled NA



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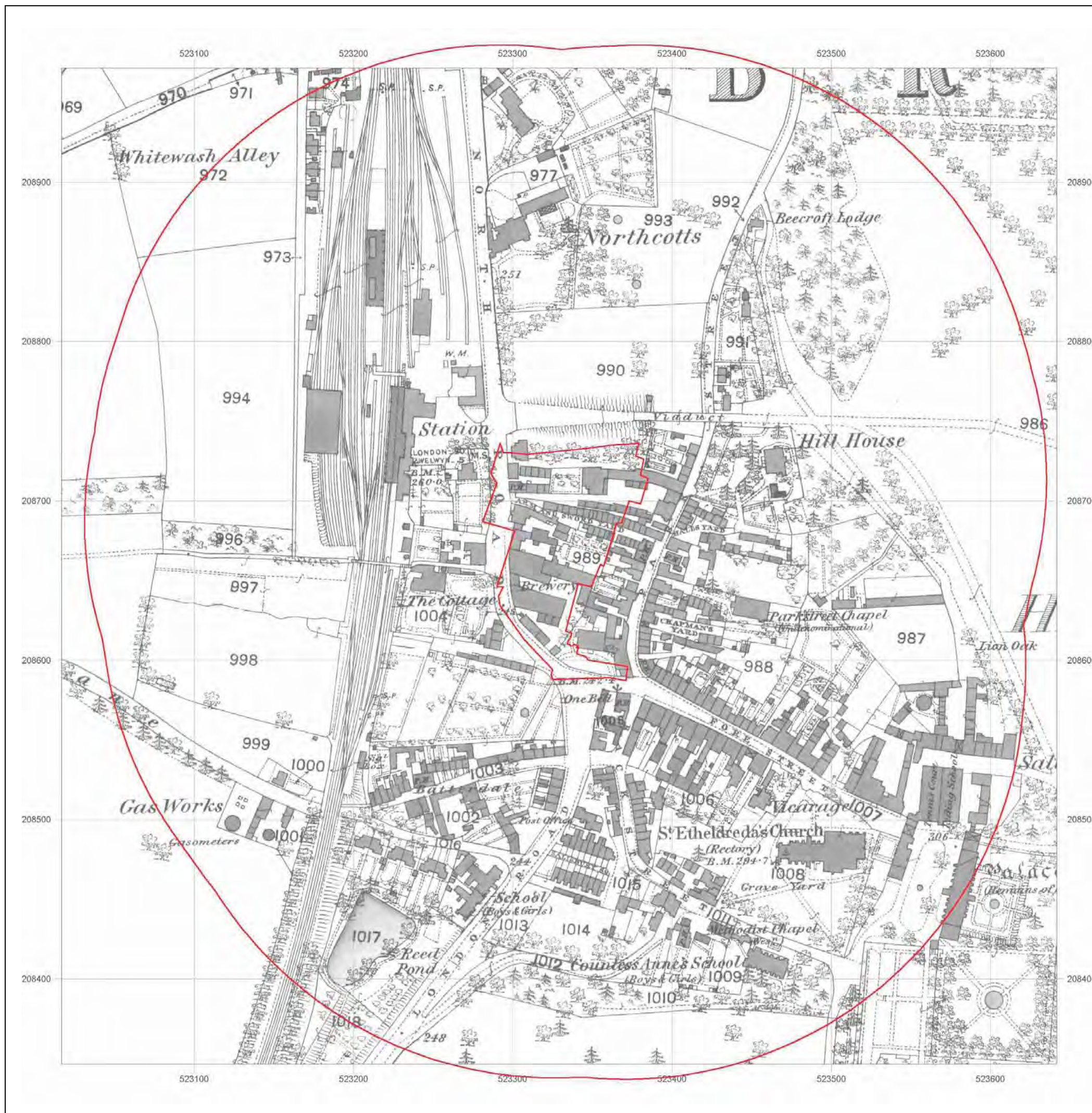


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### Site Details:

Salisbury Square, Old Hatfield, Hatfield

Client Ref: EMS\_118389\_155662

Report Ref: EMS-118389\_155662

Grid Ref: 523329, 208659

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



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## Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

Client Ref: EMS\_118389\_155662

Report Ref: EMS-118389\_155662

Grid Ref: 523329, 208659

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



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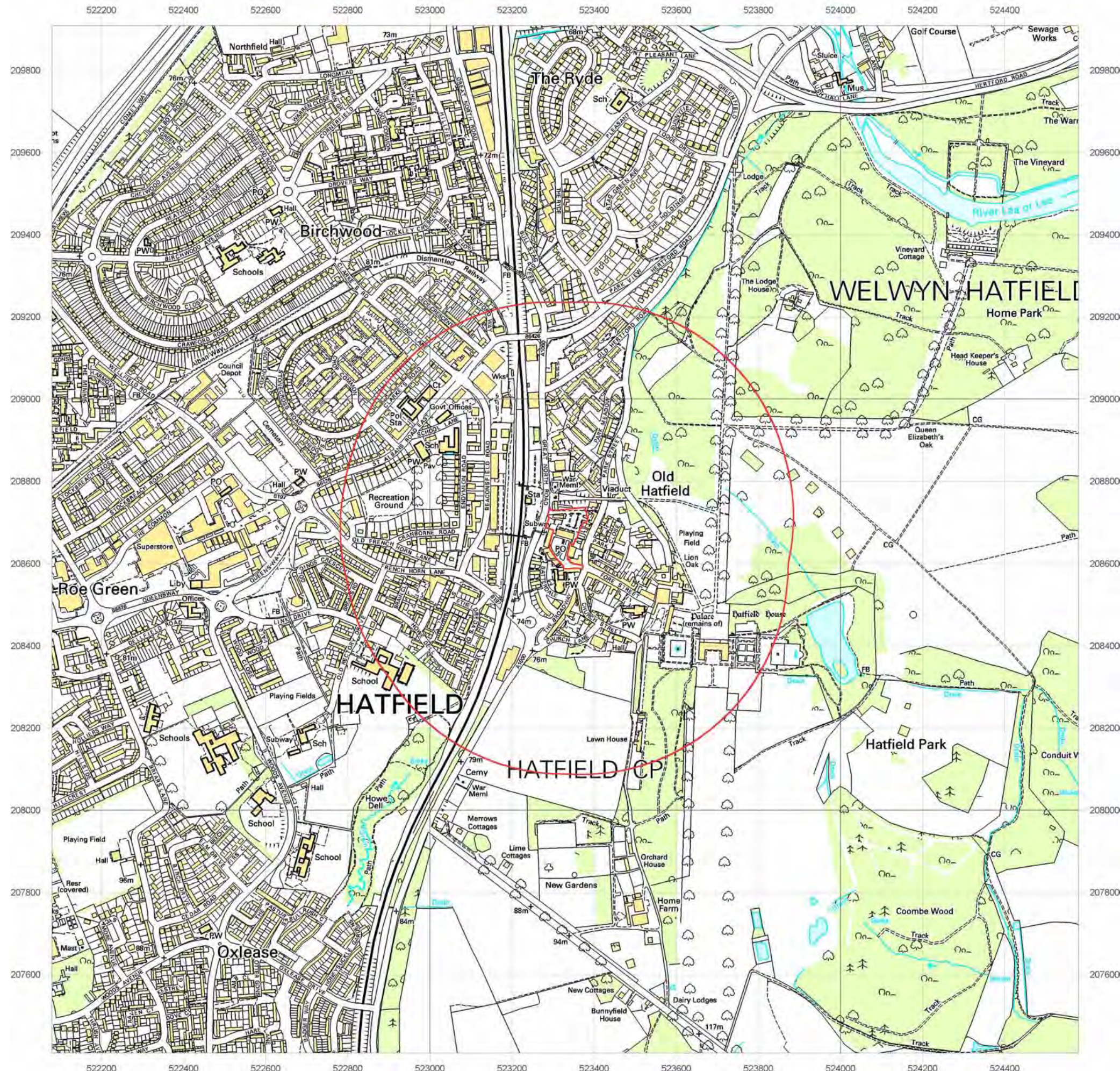


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Production date: 12 January 2011

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**Site Details:**

Salisbury Square, Old Hatfield, Hatfield

**Client Ref:** EMS\_118389\_155662  
**Report Ref:** EMS-118389\_155662  
**Grid Ref:** 523329, 208659

**Map Name:** National Grid

**Map date:** 1988

**Scale:** 1:10,000

**Printed at:** 1:10,000



Surveyed 1985  
 Revised 1988  
 Edition NA  
 Copyright NA  
 Levelled NA



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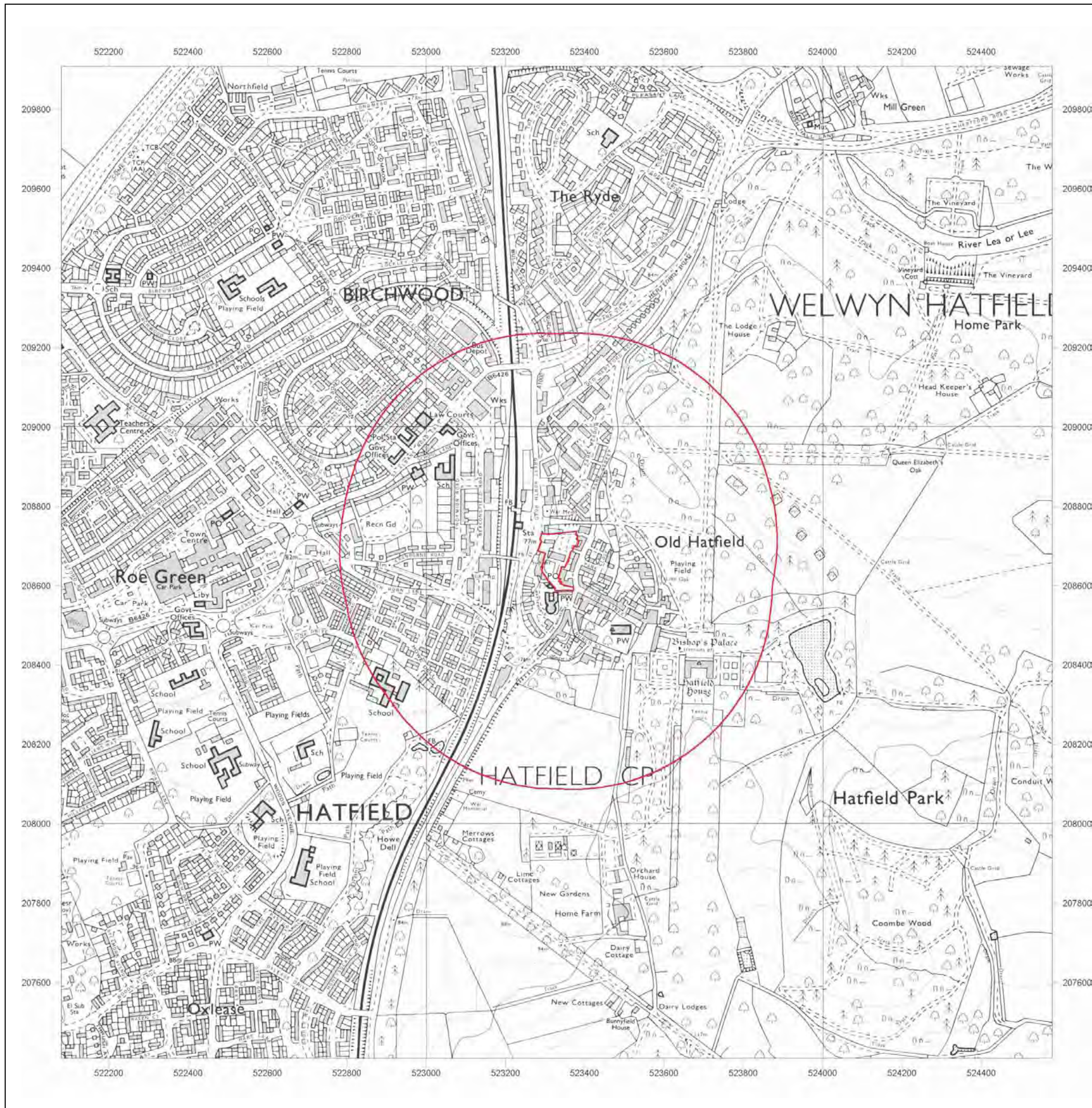


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Production date: 12 January 2011

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**Site Details:**

Salisbury Square, Old Hatfield, Hatfield

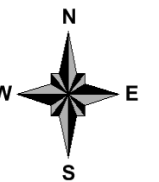
**Client Ref:** EMS\_118389\_155662  
**Report Ref:** EMS-118389\_155662  
**Grid Ref:** 523329, 208659

**Map Name:** National Grid

**Map date:** 1973

**Scale:** 1:10,000

**Printed at:** 1:10,000



Surveyed 1973  
 Revised 1973  
 Edition NA  
 Copyright NA  
 Levelled NA



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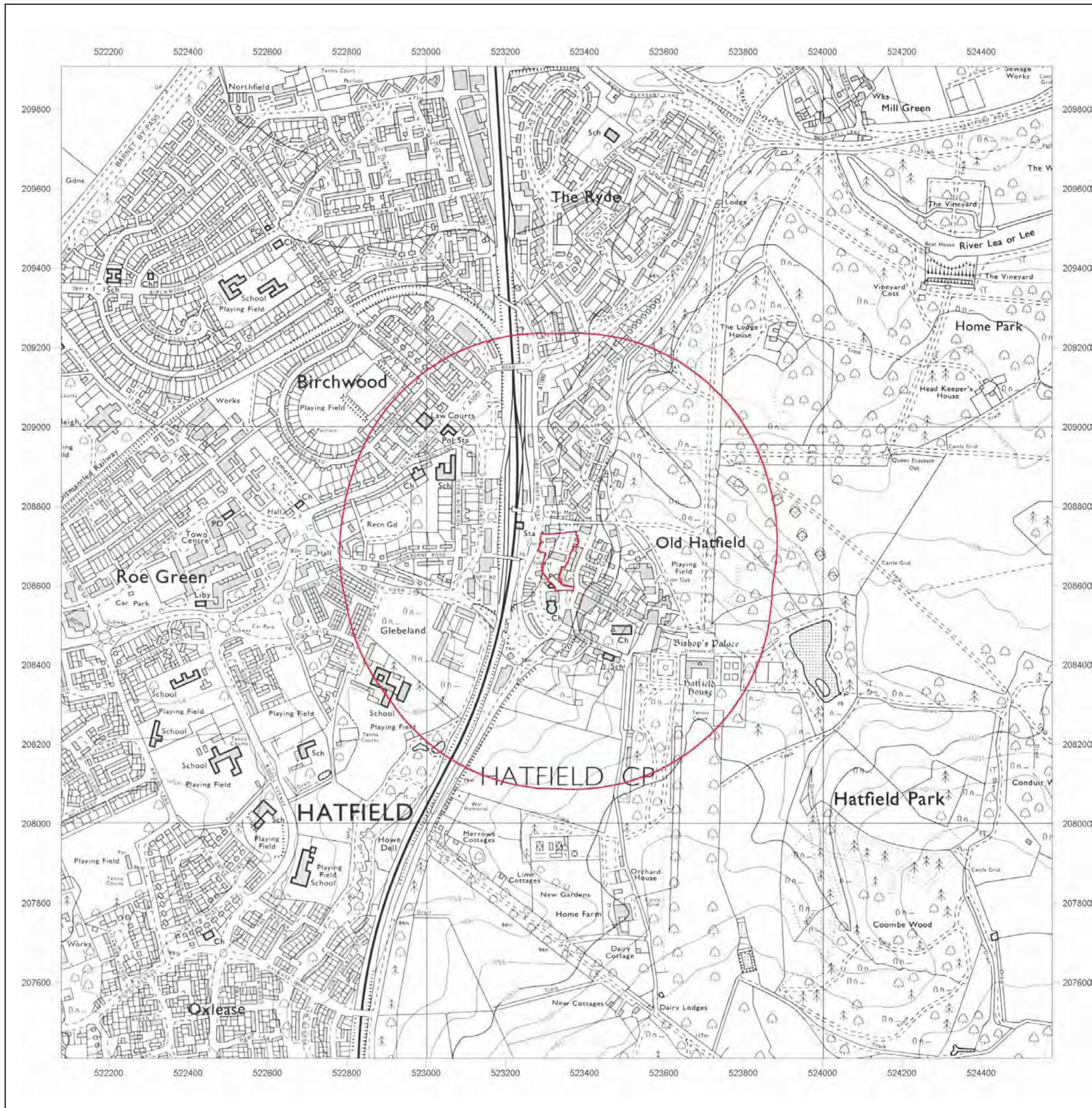


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### Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

Client Ref: EMS\_118389\_155662

Report Ref: EMS-118389\_155662

Grid Ref: 523329, 208659

Map Name: Provisional

Map date: 1955

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1955  
Revised 1955  
Edition NA  
Copyright NA  
Levelled NA



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### Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

Client Ref: EMS\_118389\_155662

Report Ref: EMS-118389\_155662

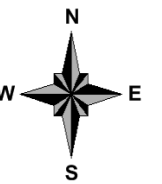
Grid Ref: 523329, 208659

Map Name: County Series

Map date: 1937-1939

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1877  
Revised 1938  
Edition NA  
Copyright NA  
Levelled NA

Surveyed 1877  
Revised 1937  
Edition NA  
Copyright NA  
Levelled NA



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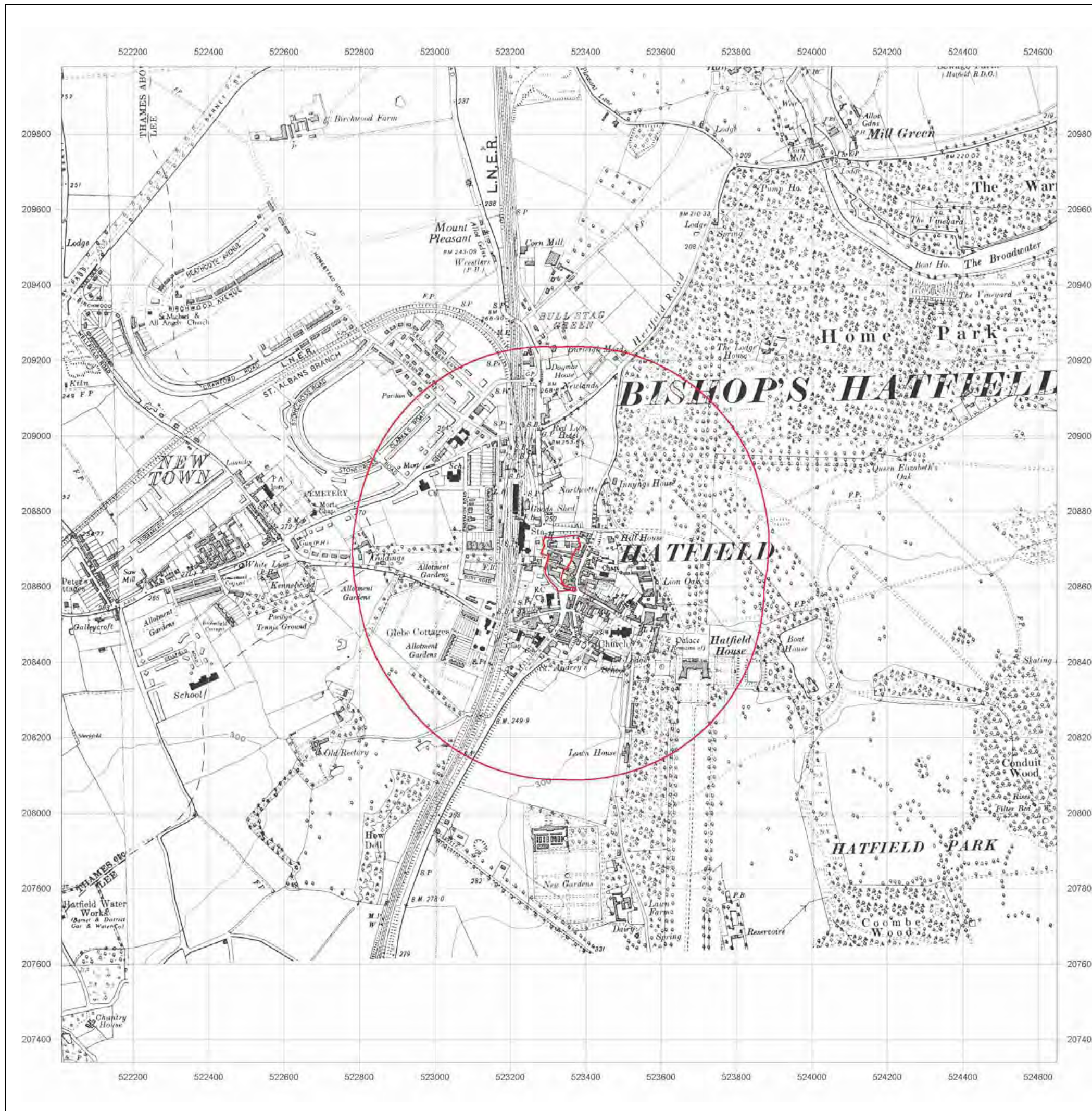


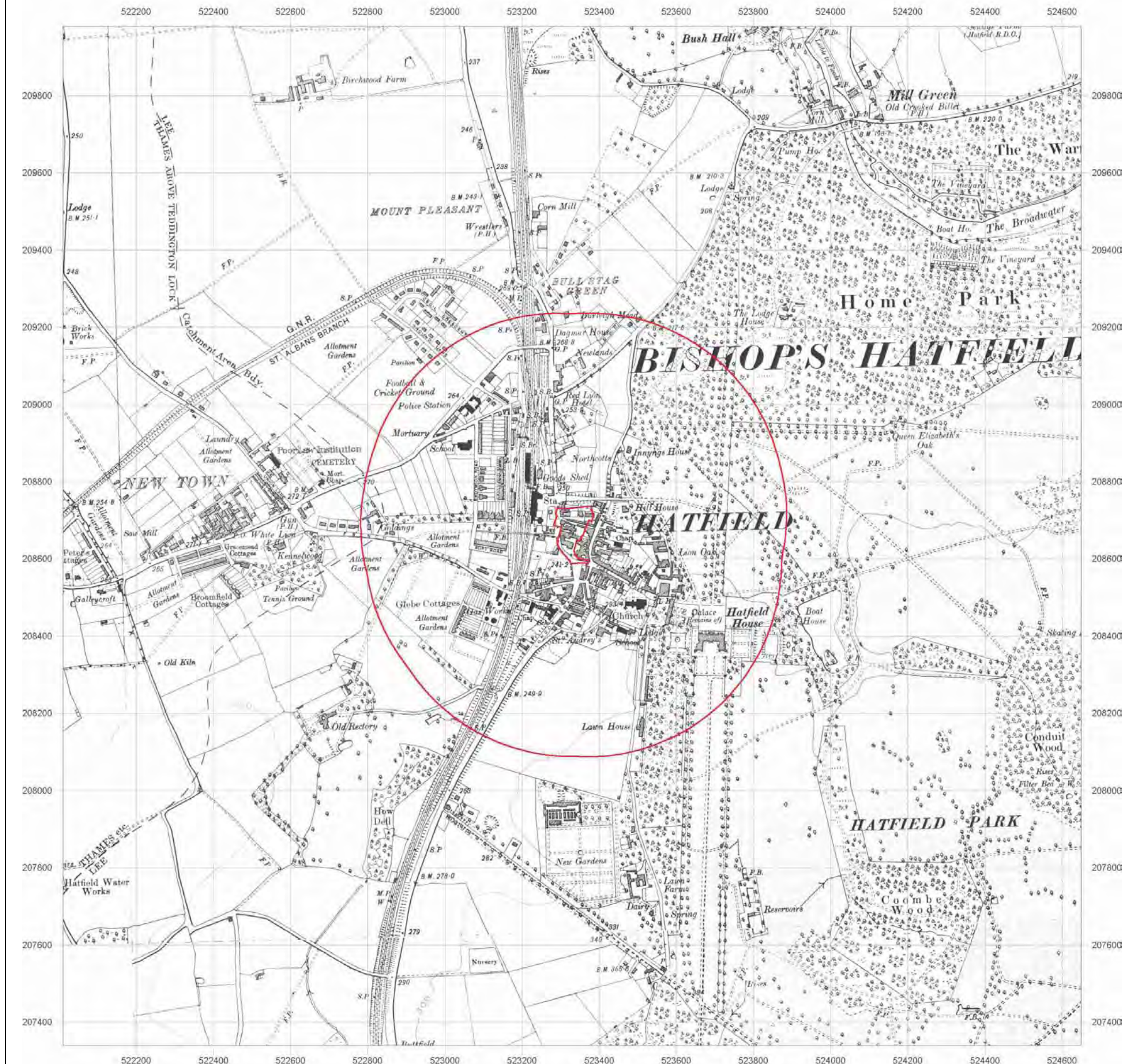
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### Site Details:

Salisbury Square, Old Hatfield, Hatfield

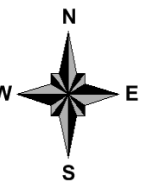
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Report Ref: EMS-118389\_155662  
Grid Ref: 523329, 208659

Map Name: County Series

Map date: 1922-1925

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1877  
Revised 1922  
Edition NA  
Copyright NA  
Levelled NA

Surveyed 1879  
Revised 1922  
Edition NA  
Copyright NA  
Levelled NA

Surveyed 1879  
Revised 1925  
Edition NA  
Copyright NA  
Levelled NA



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**Site Details:**

Salisbury Square, Old  
Hatfield, Hatfield

**Client Ref:** EMS\_118389\_155662  
**Report Ref:** EMS-118389\_155662  
**Grid Ref:** 523329, 208659

**Map Name:** County Series

**Map date:** 1896

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1878  
Revised 1896  
Edition NA  
Copyright NA  
Levelled NA

Surveyed 1879  
Revised 1896  
Edition NA  
Copyright NA  
Levelled NA

Surveyed 1878  
Revised 1896  
Edition NA  
Copyright NA  
Levelled NA

Surveyed 1879  
Revised 1896  
Edition NA  
Copyright NA  
Levelled NA



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## Site Details:

Salisbury Square, Old  
Hatfield, Hatfield

Client Ref: EMS\_118389\_155662

Report Ref: EMS-118389\_155662

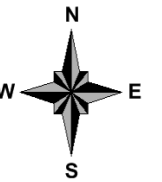
Grid Ref: 523329, 208659

Map Name: County Series

Map date: 1879

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1879  
Revised 1879  
Edition NA  
Copyright NA  
Levelled NA



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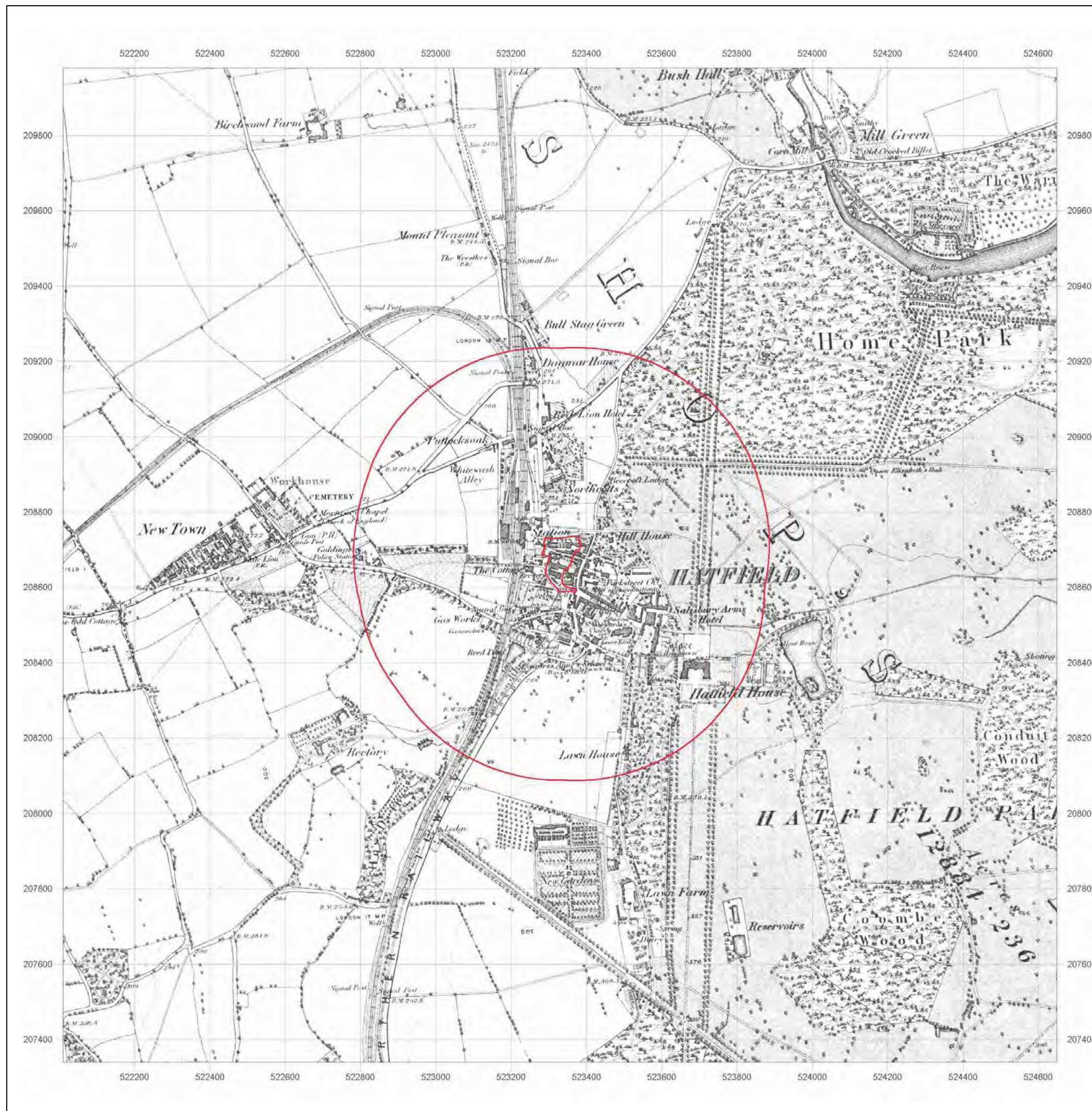


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Production date: 12 January 2011

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## Environmental Search Report

<b>Ref No:</b>	<b>29266</b>
<b>Site Name:</b>	<b>Salisbury Square</b>
<b>Site Address:</b>	<b>Salisbury Square, Great North Road, Old Hatfield, Herts AL9 5AD</b>
<b>Report Prepared For:</b>	<b>RSK STATS Geoconsult Ltd</b>
<b>Contact:</b>	<b>Ben Coulston</b>
<b>Contact number:</b>	<b>01442 416685 / 07711 075236</b>
<b>Contact e-mail:</b>	<b>bcoulston@rsk.co.uk</b>
<b>Request Received date:</b>	<b>01.02.11</b>
<b>Request Received by:</b>	<b>PHI</b>
<b>Invoice Issued:</b>	<b>01.02.11</b>
<b>Report Prepared on:</b>	<b>07/02/11</b>
<b>Report Prepared by:</b>	<b>PEH</b>
<b>Site Map: Grid Ref TL:</b>	<b>2332 0867</b>



**Site Identified in Contaminated Land Strategy:** Yes

**Site Subject to Further Investigation:** Only at time of change of use.

**Known Contamination Issues:** None on record but possible issues related to use of part of site as Hatfield Brewery.

**Known Spills in area:** No records.

**Intrusive Investigation Reports:** No records

**Landfill Sites within 250m:** No records

**Operational Dates:** Brewery opened circa 1800, closed 1920

**Type of waste deposited:** unknown

**Details of Gas Monitoring:** No records

**Any Known Nuisance Issues:** None

**Private Water Supplies Within 2Km::** None

**Flooding Records:.**N/A

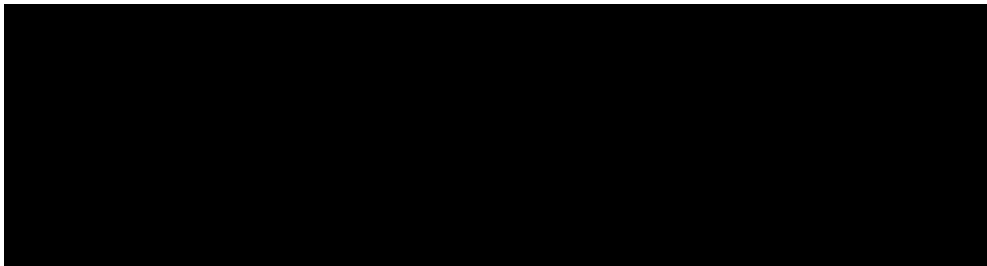
**LAPPC Premises on site or adjacent:** None

**References:**

GRAY, HENRY W, & PINHORN, MALCOLM (1960): 'PUBS AND PUBLICANS'. BOOK 3, IN Hatfield WEA (1959-64).

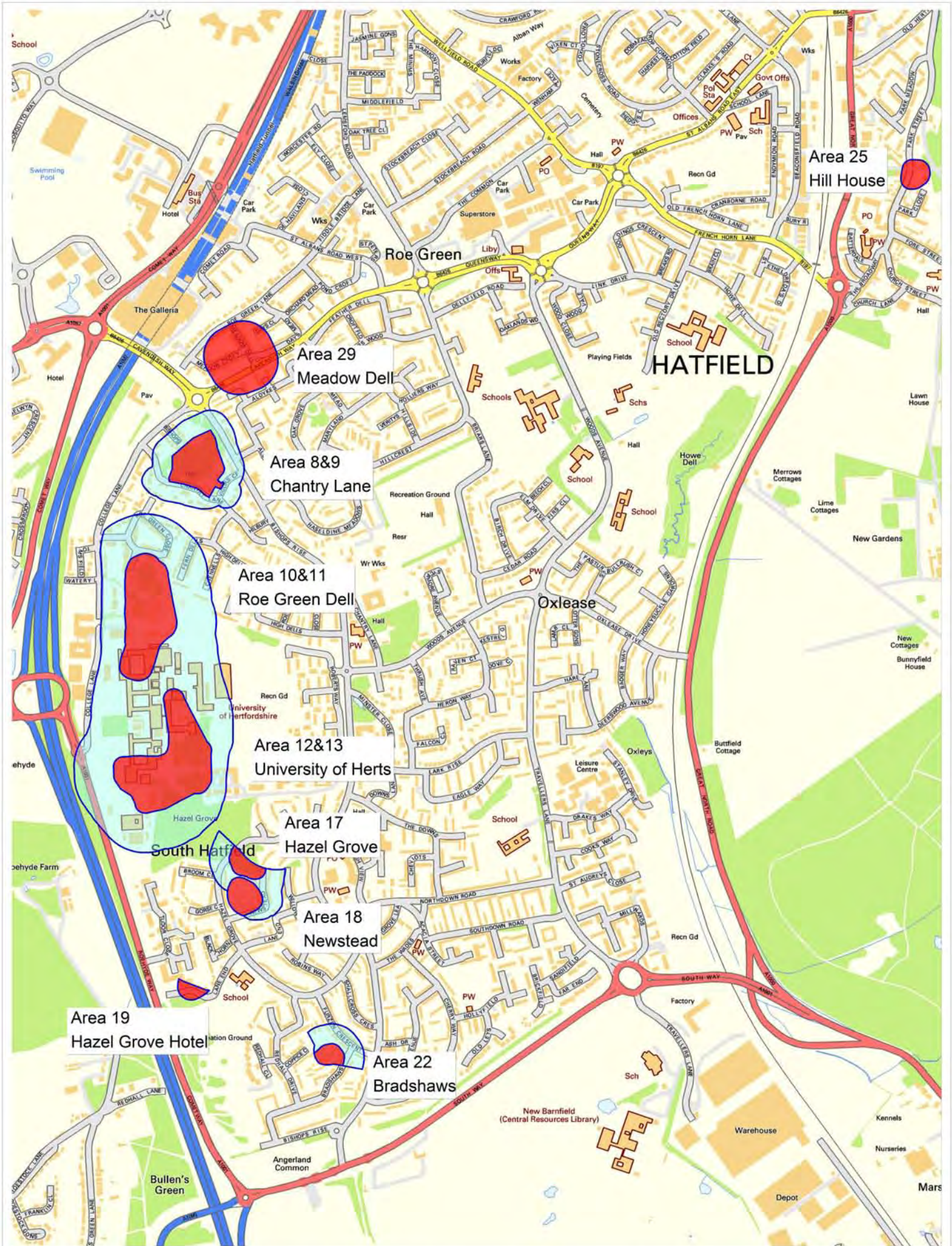
Gray, Henry W (1964): 'Families and trades'. Book 11, in Hatfield WEA (1959-64).

Signed:



**PE Hill Dip EH MCIEH**  
**Chartered Environmental Health Practitioner**

This information is supplied without prejudice to Welwyn Hatfield Council's position. No responsibility can be accepted by the Council for any negligence, omission or error on behalf of the Council in supplying the above information and you are advised to make further enquiries over and above this information as is felt necessary.



Name JRY  
 Scale  
 Title  
 Hatfield Chalk Mines



Department Project Revised Nov 2010

**APPENDIX B**  
**Fieldwork Records**

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Date:**  
2 Feb 11

**Job No:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 2

Strike	Well	Depth (m)	Depth/Type (m)	SPT 'N' or U Blows	Depth (m)	Level (mAOD)	Key	Description
		0.20	ES 1		0.18	0.18		MADE GROUND: Concrete with reinforcement
		0.25-0.50	B 1					
		0.60	D 1		0.65			
		0.70-1.30	B 2					
		0.70	D 2					
			ES 2		1.00			
		1.40	D 3		1.40			
		1.50-2.00	B 3					
		1.50-1.70	ES 3					
				N=34 [37,0](24,3,4,3)				
		2.30-2.50	ES 4		2.30			
		2.40	D 4					
		2.50-3.00	B 4					
				N=14 [4,0](4,3,3,4)				
		3.40	D 5					
		3.50-4.00	B 5					
				N=15 [5,0](4,4,4,3)				
		4.40	D 6					
		4.50-5.00	B 6					
				N=16 [4,0](3,4,4,5)				
		5.20	D 7		5.30			
				N=26 [8,0](6,6,7,7)				
		6.80	D 8					
		6.90-7.35	U 1					
		6.90-7.40	B 7					
		7.50	D 9					
				N=49 [15,0](10,12,12,15)				
		8.90	D 10					
		9.00-9.45	U 2					
		9.00-9.50	B 8					
		9.60	D 11					

Continued next sheet

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Borehole cased to 5.2m bgl. No water encountered. Undisturbed samples at 6.9m and 9.0m failed due to stiffness of clay and granular content.

**Scale:** 1:50  
**Logged by:** BC  
**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Date:**  
2 Feb 11

**Job No:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 2 of 2

Strike	Well	Depth (m)	Depth/Type (m)	SPT 'N' or U Blows	Depth (m)	Level (mAOD)	Key	Description	
		11	10.90 D 12	N=62 [21.0](14,15,14,19)				Very dense light brown clayey sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded flint and chert (GLACIAL DEPOSITS).	
		12	11.70 D 13 11.80-12.30 B 9	N=50 [15.0](12,10,12,16)	11.80				
		13		N=90 [25.0](15,15,27,33)		1.00			
		14		-74/150mm [31/150](74/150)	12.80				
		15							
		16							
		17							
		18							
		19							
								----- <b>End of Borehole at 12.80 m</b>	

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Borehole cased to 5.2m bgl. No water encountered. Undisturbed samples at 6.9m and 9.0m failed due to stiffness of clay and granular content.

**Scale:** 1:50

**Logged by:** BC

**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Date:**  
3 Feb 11

**Job No:**  
241882

**GROUND WATER      SAMPLES/TESTS      STRATA RECORD      Sheet 1 of 2**

Strike	Well	Depth (m)	Depth/Type (m)	SPT 'N' or U Blows	Depth (m)	Level (mAOD)	Key	Description
			0.00-0.50 B 1			0.30		MADE GROUND: Grass over dark brown sandy silty CLAY with traces of angular to subrounded fine to coarse flint, brick, concrete and occasional clinker. Occasional roots and rootlets.  MADE GROUND: Dark brown very sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded brick, clinker, concrete and flint. Occasional ashy deposits. Occasional subangular cobbles of concrete and brick. ...@ 1.4m Reduction in sand and gravel content, particularly concrete and chalk clasts  ...@ 2.1m Increase in gravel constituents, particularly brick and concrete
			0.25 ES 1		0.30			
			0.50 ES 2					
			0.60 D 1					
			0.70-1.30 B 2					
			0.90 ES 3					
			1.40 ES 4			2.70		
			1.50 D 2					
			1.60-2.05 U 1					
			1.60-2.00 B 3					
			2.10 D 3					
			2.10-2.60 B 4	N=47 [30.0](16,12,12,7)				
			3.00 D 4		3.00			
			3.10-3.60 ES 5					
				N=20 [7.0](6,5,5,4)				
			3.90 D 5			1.90		
			4.00-4.50 B 6					
				N=14 [5.0](3,3,4,4)				
			4.90 D 6		4.90			
			5.00-5.50 ES 6					
				N=17 [5.0](5,5,4,3)		0.70		
			5.60 D 7		5.60			
			5.70-6.15 U 2	U65				
			6.20 D 8					
			6.90 D 9					
				N=37 [12.0](8,8,9,12)				
			8.40 D 10			7.90		
			8.50-8.95 U 3	U130				
			9.00 D 11					
			9.90 D 12					

*Continued next sheet*

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Borehole cased to 6.0m bgl. Groundwater encountered at 4.9m, rising to 4.7m in 30 minutes. Water sealed out at 6.0m. Monitoring well installed to 6.0m bgl, comprising 1m plain casing, 5m slotted. Undisturbed sample at 1.6m failed due to granular content.

**Scale:** 1:50

**Logged by:** BC

**Figure:** App B



**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Date:**  
3 Feb 11

**Job No:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 2 of 2

Strike	Well	Depth (m)	Depth/Type (m)	SPT 'N' or U Blows	Depth (m)	Level (mAOD)	Key	Description
		11	11.40 D 13 11.50-12.00 B 8	S N=67 [18,0](14,14,18,21)				
		12	12.10 D 14	S N=59 [15,0](12,15,14,18)				
		13	12.80 D 15	S N=61 [8,0](12,16,16,17)				
		14	13.50 D 16 13.50-14.00 B 9	C 94/225mm [20/150](94/225) C N=97 [17,0](12,23,29,33)	13.50 14.50	1.00		Very dense brown sandy GRAVEL. Sand is fine to coarse (predominantly medium to coarse). Gravel is subangular to subrounded fine to medium flint and chert (GLACIAL DEPOSITS).
		15						<i>End of Borehole at 14.50 m</i>
		16						
		17						
		18						
		19						

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Borehole cased to 6.0m bgl. Groundwater encountered at 4.9m, rising to 4.7m in 30 minutes. Water sealed out at 6.0m. Monitoring well installed to 6.0m bgl, comprising 1m plain casing, 5m slotted. Undisturbed sample at 1.6m failed due to granular content.

**Scale:** 1:50  
**Logged by:** BC  
**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**TP1**

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
2 Feb 11

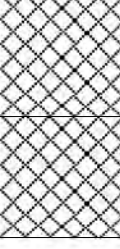
**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 1

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description
			ES1 0.10					MADE GROUND: Grass over dark brown sandy silty CLAY with traces of angular to subrounded fine to coarse flint, brick, concrete and occasional clinker. Occasional roots and rootlets.
			ES2 0.40		0.40	0.40		MADE GROUND: Light brown/orange-yellow slightly clayey gravelly SAND. Gravel is angular to subrounded flint, brick and concrete. Occasional subangular fine to medium clinker and ash. Occasional subangular cobbles of concrete.
			ES3 0.70		0.80	0.40		<b>End of Trial Pit at 0.80 m</b>
		1						
		2						
		3						
		4						

**Remarks and Water Observations**

Hand-excavated trial pit. CBR at 0.2m: 3%, CBR at 0.5m: 14%, CBR at 0.7m: 28%. Trial pit remained dry and stable. Exploratory hole terminated due to concrete spanning base of pit.

**Key for Insitu tests**

HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Scale:** 1:25

**Logged by:** BC

**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**TP2**

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
2 Feb 11

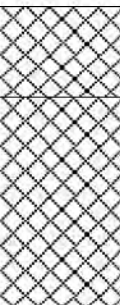
**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 1

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description
			ES1 0.20		0.30	0.30		MADE GROUND: Grass over dark brown sandy silty CLAY with traces of angular to subrounded fine to coarse flint, brick, concrete and occasional clinker. Occasional roots and rootlets. Occasional woody fragments.
			ES2 0.50					MADE GROUND: Light brown very sandy silty CLAY with traces of angular to subrounded medium to coarse brick, concrete and flint. Occasional subangular cobbles of brick. Occasional fine rootlets.
		1	ES3 1.00		1.00	0.70		...@ 0.5m Becoming lighter brown. Onset of clinker and occasional fragments of bitumen ...@ 0.85 to 0.90m Relatively weak concrete
		2						<b>End of Trial Pit at 1.00 m</b>
		3						
		4						

**Remarks and Water Observations**

Hand-excavated trial pit. CBR at 0.2m: 2%, CBR at 0.5m: 3%, CBR at 0.8m: 12%. Trial pit remained dry and stable.

**Key for Insitu tests**

HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Scale:** 1:25

**Logged by:** BC

**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**TP3**

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
2 Feb 11

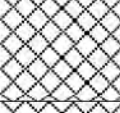
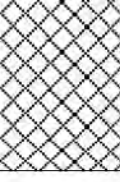
**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 1

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description
			ES1 0.10		0.35	0.35		MADE GROUND: Grass over dark brown sandy silty CLAY with traces of angular to subrounded fine to coarse flint, brick, concrete and occasional clinker. Occasional roots and rootlets.
			ES2 0.50		0.95	0.60		MADE GROUND: Light brown gravelly very clayey SAND/very sandy CLAY. Sand is predominantly fine to medium. Gravel is angular to subrounded fine to coarse (predominantly medium to coarse) brick, concrete, clinker and flint. Occasional subangular fine fragments of chalk. ...@ 0.55m Subangular cobble-sized fragment of concrete
		1						<b>End of Trial Pit at 0.95 m</b>
		2						
		3						
		4						

**Remarks and Water Observations**

Hand-excavated trial pit. CBR at 0.2m: 3%, CBR at 0.6m: 7%. Trial pit remained dry and stable.

**Key for Insitu tests**

HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Scale:** 1:25

**Logged by:** BC

**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
3 Feb 11

**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 2

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description	
			ES1 0.20-0.30					MADE GROUND: Grass over dark brown clayey silty gravelly SAND. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium flint. Frequent fine rootlets.	
			ES2 0.50-0.60		0.45	0.45		MADE GROUND: Orange/light brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse flint, ceramics, brick and clinker.	
			B1 0.90-1.10		0.90	0.45		MADE GROUND: Grey slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is subangular fine to medium flint and subangular fine brick and occasional clinker. Occasional black specks of decomposing organic matter. Organic odour.	
			B2 1.20-1.40	S					MADE GROUND: Orange/brown/light brown slightly gravelly CLAY. Gravel is subangular fine to medium flint, brick and infrequent clinker. Occasional black specks of decomposing organic matter
			B3 1.40-1.70		1.40	0.50			
			B4 1.85-2.00	S	1.90	0.50			...@ 1.80 to 1.85m Crushed concrete, recovered as subangular medium to coarse gravels and occasional flint
				S				MADE GROUND: Brown/white sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium flint, brick clinker and low to medium density chalk.  ...@ 2.55m Coarse gravel-sized fragment of brick within sample ...@ 2.70m Crushed concrete encountered in sample tube	
					3.00	1.10			
				S				Stiff dark grey slightly sandy slightly gravelly CLAY with subrounded fine chalk and flint gravels (GLACIAL DEPOSITS).	

Continued next sheet

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Exploratory hole remained dry and stable.

**Scale:** 1:25

**Key for Insitu tests**  
HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Logged by:** SOC

**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
3 Feb 11

**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 2 of 2

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description
		6		S N=28 [5,6][6,7,8]	5.20	2.20		End of Borehole at 5.20 m
		7						
		8						
		9						

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Exploratory hole remained dry and stable.

**Scale:** 1:25

**Key for Insitu tests**  
HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Logged by:** SOC

**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
3 Feb 11

**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 1

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description
			ES1 0.20-0.30		0.13	0.13		MADE GROUND: Concrete with reinforcement
			ES2 0.50-0.60		0.45	0.32		MADE GROUND: Orange/brown clayey sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium flint. Occasional fine rootlets.
	1		B1 1.70-1.90	S N=17 (4,5)(4,5,4,4)	1.80	1.35		MADE GROUND: Orange/brown clayey gravelly SAND. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse flint and flint cobbles.
	2		B2 3.50-3.75	C N=4 (2,1)(1,1,1,1)				Loose to medium dense orange/brown SAND with traces of fine subrounded flint gravels. Sand is predominant coarse (GLACIAL DEPOSITS).
	3		B3 3.80-4.00	C N=13 (1,1)(2,3,4,4)	3.75	1.95		Firm dark grey silty CLAY (GLACIAL DEPOSITS).
	4			S N=14 (2,3)(3,3,4,4)	4.00	0.25		<i>End of Borehole at 4.00 m</i>

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Exploratory hole remained dry and stable. Monitoring well installed to 3m bgl, comprising 1m plain casing, 2m slotted.

**Scale:** 1:25

**Key for Insitu tests**  
HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Logged by:** SOC

**Figure:** App B

**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
3 Feb 11

**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 1

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description
			ES1 0.20-0.30		0.13	0.13		MADE GROUND: Concrete with reinforcement
			ES2 0.50-0.60		0.45	0.32		MADE GROUND: Orange/brown clayey sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium flint. Occasional fine rootlets. ...@ 0.40 to 0.42m Horizon of lean-mix concrete
	1		B1 1.00-1.20	C				MADE GROUND: Orange/brown clayey SAND and GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse (predominantly fine to medium) flint.
			B2 1.60-1.80	N=16 (4,4)(4,4,4,4)				...@ 1.60m Onset of occasional subangular fine brick and specks of decomposing organic matter. Roots noted in sample tube
	2		B3 2.10-2.30	C				...@ 2.10m Becoming softer
			B4 2.65-2.85	N=12 (2,2)(2,3,3,4)				...@ 2.60m Occasional linear inclusions of coarse sands
			B5 2.90-3.30	S				Brown/orange/grey slightly silty slightly gravelly CLAY. Sand is coarse. Gravel is subangular to subrounded fine flint (GLACIAL DEPOSITS).
	3		B6 3.60-3.80	N=11 (4,3)(2,3,3,3)				Medium dense orange/brown SAND. Sand is medium to coarse (GLACIAL DEPOSITS).
			B7 3.90-4.00	S				Stiff grey, becoming dark grey by 3.8m silty CLAY with occasional subrounded fine flint and low to medium density chalk (GLACIAL DEPOSITS).
	4			N=21 (3,3)(3,5,6,7)				<i>End of Borehole at 4.00 m</i>

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Exploratory hole remained dry and stable.

**Scale:** 1:25

**Key for Insitu tests**  
HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Logged by:** SOC

**Figure:** App B



**Site:**  
Salisbury Square, Old Hatfield

**Location:**  
Salisbury Square, Old Hatfield

**Client:**  
Gascoyne Cecil Estate

**Ground Level:**  
GL not measured

**Dates:**  
3 Feb 11

**Job No.:**  
241882

**GROUND WATER**

**SAMPLES/TESTS**

**STRATA RECORD**

Sheet 1 of 1

Strike	Well	Depth (m)	Type/Depth (m)	In-situ Tests	Depth (m)	Level (mAOD)	Key	Description
			ES1 0.20-0.30		0.13	0.13		MADE GROUND: Concrete with reinforcement
			ES2 0.50-0.60					MADE GROUND: Orange/brown clayey sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium flint. Occasional fine rootlets.
		1		C	1.25	1.12		MADE GROUND: Brown/dark brown slightly clayey gravelly SAND. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium flint and brick.
			B1 1.40-1.60	N=26 [2,3](4,7,7,8)				...@ 1.80m Becoming lighter brown
		2		C	2.20	0.95		Brown silty CLAY with occasional subangular fine flint (GLACIAL DEPOSITS).
			B2 1.80-2.00	N=12 [2,3](3,3,3,3)	2.50	0.30		Brown slightly clayey gravelly SAND. Gravel is subangular to subrounded fine flint (GLACIAL DEPOSITS).
					2.70	0.20		Stiff dark brown/dark grey CLAY with subangular fine flint and occasional chalk (low to medium density) gravels (GLACIAL DEPOSITS).
		3		S	3.00	0.30		<i>End of Borehole at 3.00 m</i>
		4						

**Remarks and Water Observations**

Service inspection pit to 1.2m bgl. Exploratory hole remained dry and stable. Monitoring well installed to 3m bgl, comprising 1m plain casing, 2m slotted.

**Scale:** 1:25

**Key for Insitu tests**  
HV-Hand Vane (kN/m2)  
PP-Pocket Penotometer (kN/m2)  
MP-Mackintosh Probe (N150)

**Logged by:** SOC

**Figure:** App B



## **APPENDIX C**

### **Geotechnical Laboratory Test Records**



Ben Coulston  
RSK STATS Geoconsult LIMITED  
18 Frogmore Road  
Hemel Hempstead  
Herts  
HP3 9RT

## STRUCTURAL SOILS LTD

SITE INVESTIGATION

SOIL ROCK &  
MATERIAL TESTING

GEOTECHNICAL  
CONSULTANCY

CONTAMINATED  
LAND ASSESSMENT

22<sup>nd</sup> February 2011

### TESTING REPORT

YOUR REF: 241882

SITE: Salisbury Square, Hatfield

CERTIFICATE NUMBER: 581511

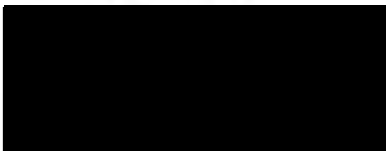
DATE SAMPLES RECEIVED: 9<sup>th</sup> February 2011  
DATE TESTING COMMENCED: 9<sup>th</sup> February 2011

DATE OF SAMPLE DISPOSAL: 22<sup>nd</sup> March 2011

INSTRUCTIONS: Please carry out Moisture Content, Atterberg Limits, Quick Undrained Triaxial and Particle Size Distribution tests on samples provided.

I have pleasure in enclosing the test report for the above project that you submitted to us for testing.

Yours sincerely



Paul Kent  
Laboratory Manager

Enc.

18 FROGMORE ROAD  
HEMEL HEMPSTEAD  
HERTS  
HP3 9RT  
TEL: 01442 416660  
FAX: 01442 437550  
hemel@soils.co.uk  
www.soils.co.uk


HEAD OFFICE:  
Bristol

BRANCH OFFICE:  
Castleford  
West Yorkshire

# SUMMARY OF MOISTURE CONTENT TESTING

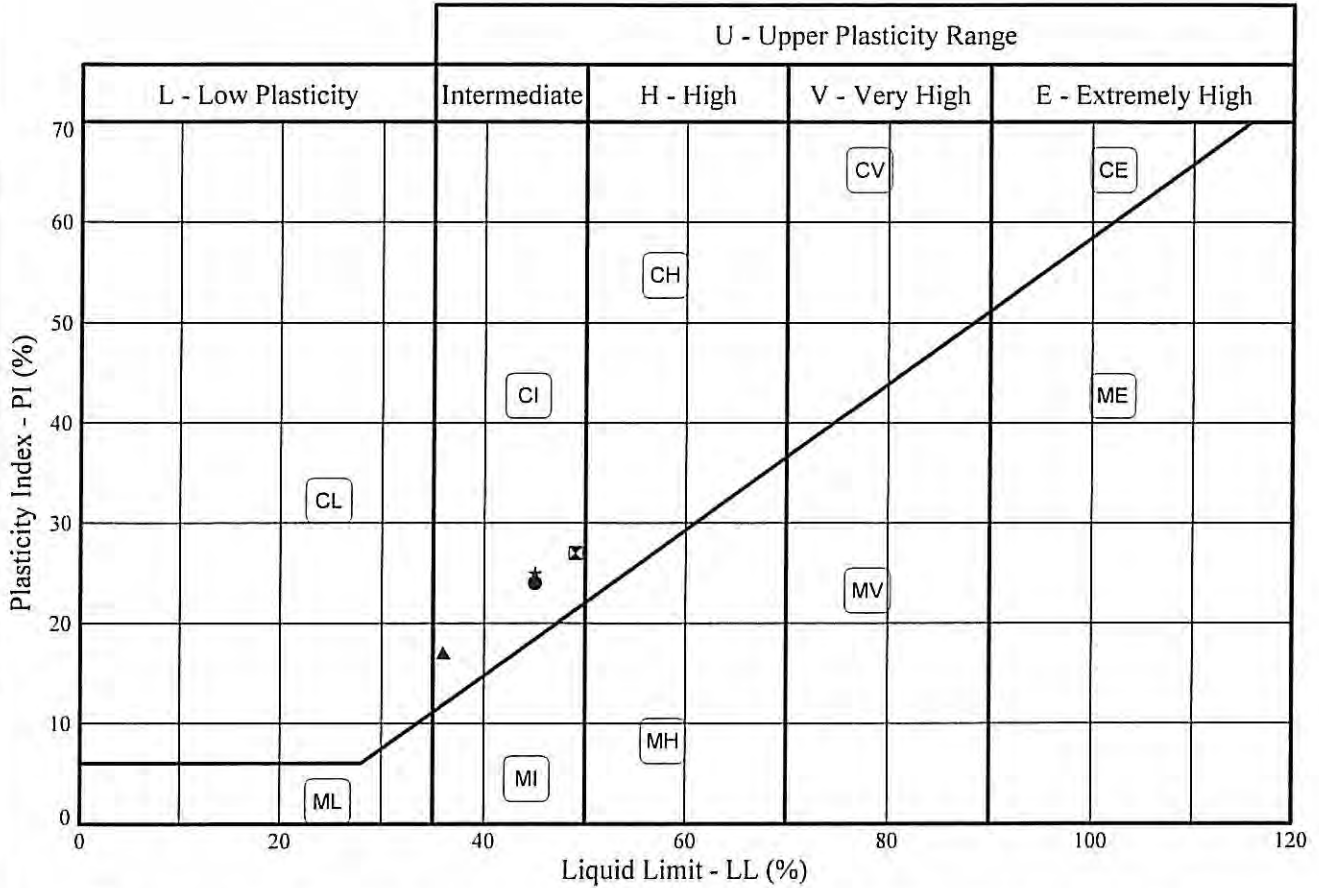
Exploratory Position ID	Depth (m)	Sample Ref	Sample Type	Moisture Content (%)
BH1	6.90		D	22
BH1	9.00		B	17
BH2	3.00		D	22
BH2	5.60		D	22
BH2	5.70		U	19
BH2	8.50		U	15

GINT\_LIBRARY\_V8\_04.GLBIL - COLLECTIONS - MC | 581511-SALISBURY SQUARE, HATFIELD-241882-RSK STATS GEO.GPJ - v8\_04 | 22/02/11 - 08:29 | PK.

 <p><b>STRUCTURAL SOILS</b> 18 Frogmore Road Hemel Hempstead Hertfordshire HP3 9RT</p>	Compiled By: [REDACTED]	Date: 22/02/11	Checked By: [REDACTED]	Date: 22.2.11
	Contract: <b>Salisbury Square, Hatfield</b>		Contract Ref: <b>581511</b>	
			Page: 2 of 7	

# PLASTICITY CHART - PI Vs LL

In accordance with clause 42.3 of BS5930:1981  
Testing in accordance with BS1377-2:1990



Sample Identification			BS Test Method #	Preparation Method +	MC %	LL %	PL %	PI %	<425um %	
Exploratory Position ID	Sample	Depth (m)								
●	BH1	D	6.90	3.2/4.4/5.3/5.4	4.2.4	22	45	21	24	90
☒	BH1	B	9.00	3.2/4.4/5.3/5.4	4.2.4	17	49	22	27	84
▲	BH2	D	3.00	3.2/4.4/5.3/5.4	4.2.4	22	36	19	17	67
*	BH2	D	5.60	3.2/4.4/5.3/5.4	4.2.4	22	45	20	25	89

# Tested in accordance with the following clauses of BS1377-2:1990.  
3.2 - Moisture Content  
4.3 - Cone Penetrometer Method  
4.4 - One Point Cone Penetrometer Method  
4.6 - One Point Casagrande Method  
5.3 - Plastic Limit Method  
5.4 - Plasticity Index

+ Tested in accordance with the following clauses of BS1377-2:1990.  
4.2.3 - Natural State  
4.2.4 - Wet Sieved

Key: \* = Non standard test, NP = Non plastic.

Approved Signatories: P. KENT S. CAIRNS



**STRUCTURAL SOILS**  
18 Frogmore Road  
Hemel Hempstead  
Hertfordshire  
HP3 9RT

Compiled By		Date
[Redacted]		22/02/11
Contract		Contract Ref:
Salisbury Square, Hatfield		581511
Page		3 of 7