



The Delph, Bethania Road, Wrexham
Coal Mining Risk Assessment

Prepared for JW Contractors Ltd

DOCUMENT CONTROL

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Project Engineer:	P. Windslow
Date of Issue:	23/06/2023

This report has been prepared by GroundSolve Ltd with all reasonable care and diligence, within the best practice and guidance current at the time of issue within the proposed redline boundary and proposed Site end use as presented by the Client.

This report is confidential to the Client and GroundSolve Ltd accepts no responsibility whatsoever to third parties to whom this report is presented.

Version No.	Description	Date of Issue	Author	Reviewed By	Approved By
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1.0 INTRODUCTION

1.1 Introduction

Groundsolve Ltd was instructed by JW Contractors Ltd on behalf of The Delph Bar and Restaurant (the Client) to undertake a Coal Mining Risk Assessment (CMRA) for a site at Bethania Road, Wrexham.

This report assesses the ground-based risks, constraints, and liabilities associated with former coal workings to the development of the site. This is required in support of the discharge of contaminated land planning conditions (retrospective) assigned to the site.

1.2 Legislative Context

The purpose of the Report is to present a desk-based review of all available information on the coal mining legacy relevant to the Site, and then, propose further investigation or mitigation measures that address the coal mining legacy. The Report also sets out how the requirements of national planning policy with regard to development on unstable land are to be addressed.

This report has been devised to generally comply with the relevant principles and requirements of a range of guidance including:

- National Planning Policy Framework (HCA, February 2019);
- BS5930:2015: "Code of practice for site investigations";
- The Coal Authority 'Risk based approach to development management. Guidance for developers" Version 4 - 2017;
- The Building Regulations 2010. Part C (HM Government 2013)
- Coal Authority: 2019: Guidance on Managing the Risk of Hazardous Gases when Drilling or Piling Near Coal. Version 2 (April 2019). Written and published in conjunction with AGS, BDA, HSE and FPS.

1.3 Scope of the Coal Mining Risk Assessment

The purpose of this Preliminary Coal Mining Risk Assessment Report is to:

- Present a desk-based review of all available information on the coal mining issues which are relevant to the application site;
- Use that information to identify and assess the risks to the proposed development from coal mining legacy, including the cumulative impact of issues;

- Set out appropriate mitigation measures to address the coal mining legacy issues affecting the site, including any necessary remedial works and/or demonstrate how coal mining issues have influenced the proposed development; and
- Demonstrate to the Local Planning Authority that the application site is, or can be made, safe and stable to meet the requirements of national planning policy with regard to development on unstable land.

1.4 Sources of information

The following sources of information have been consulted and reviewed to assist in the preparation of this CMRA:

- British Geological Survey (BGS) Geological Mapping 1: 50,000 - Sheet 121, Wrexham, 1993; and,
- Coal Authority Consultant Coal Mining Report, Ref.: 51003360534001.

1.5 Planning Status & Requirements

This report is designed to comply with the requirements of The National Planning Policy Framework (NPPF, 2019) and is intended to be used by the developer as part of the submission to gain planning for the works.

2.0 SITE LOCATION & DESCRIPTION

2.1 The Site

The site is a children's play area present to the north of The Delph Bar and Restaurant, Acrefair, Wrexham, LL14 3TY (327880E, 343310N), accessed off Bethania Road.

The site comprises a children's play area with a retaining structure to the west, car park to the east, a seating area and the restaurant to the south.

The site location and boundary are shown in drawing 2939-1-001.

2.2 New Development

An area of the car park has been redeveloped as a children's play area with associated play equipment.

3.0 GEOLOGICAL & ENVIRONMENTAL SETTING

3.1 Geology

The geology of the site area has been studied using the latest 1:50,000 scale geological mapping from the British Geological Survey (BGS) online viewer, together with the published 1:10,000 scale mapping and 1:50,000 Sheet Mapping (Sheet 121, Wrexham, 1993).

Superficial deposits in the area comprise Till (Diamicton). This is not mapped as present to the north of the site and as such may not be very thick.

Bedrock comprises Pennine Lower Coal Measures Formation (Mudstone, Siltstone and Sandstone). No dip or strike values are given in the local area.

A fault is present to the north of the site which runs northeast to southwest.

The Fireclay Group coal seam is present 150m west of the site and an unnamed coal seam is present 50m east of the site. Based on the stratigraphy this could be the Crown, Upper Red or Lower Red seams. A coal seam is also present around 40m to the north of the site. It is unlikely that this seam influences the site due to the presence of the intervening fault.

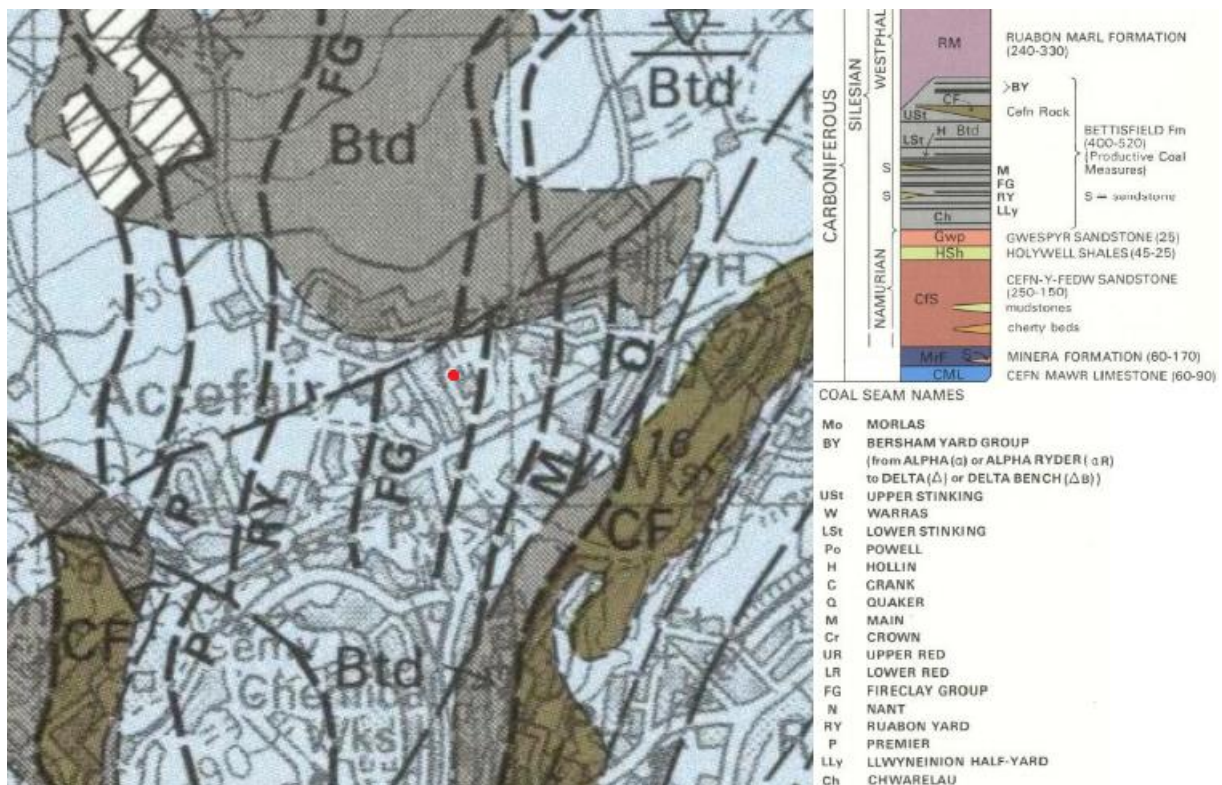


Plate 3.1 – Approximate location of the site superimposed over 1:50,000 scale geological mapping (Sheet 121, Wrexham)



Plate 3.2 – Approximate location of Mine entries and Coal Seams.

3.2 Site History

The earliest historical mapping dates back to 1873 and an extract is given below. The mapping shows that the study site comprises an area of raised ground with railway tracks. The railway tracks appear to be used to transport waste materials possibly associated with the New British iron Works roughly 250m southeast.

The historical mapping shows no evidence of the two mines shafts located close to the site. A number of other old shafts are identified within the area (closest approx. 75m west).



Plate 3.3 – Extract from 1:2,500 historical mapping - 1875

The railway track was no longer present by 1899 mapping. The site remained undeveloped until 1977 mapping where a building and associated car parking appear. The building is altered by 2001 mapping and the site remains in roughly the same configuration to the present.

The Historic mapping records are presented in **Appendix A**.

4.0 COAL AUTHORITY DATA

The following information has been provided by the Coal Authority and is summarised below.

4.1 Consultants Mining Report

Information pertinent to the site is summarised below. The full report is presented in **Appendix B**.

Table 4.1 Summary of Past underground Mining

Seam	Depth (m)	Direction of working	Dip rate of Seam (degrees)	Extraction thickness (m)	Year Last mined
Firecamp	49	North west	8.1	2.0	1880
Firecamp	55	South east	8.1	2.0	1880
Stone	60	North	8.1	0.6	1912

These seams are at a significant depth and all movement should have stopped by now.

There are no probable unrecorded shallow workings.

There are two shafts within influencing distance of the site:

- 327343-533 – Potentially 10m south of the site.
- 327343-527 – Potentially 15m northwest of the site.

The Coal Authority have no details of any treatment undertaken for these shafts. GSL contacted the Coal Authority with regards to any further information about the shafts affecting the site and their provenance as these do not appear to be present on earliest historical mapping. The Coal Authority responded:

‘Unfortunately we do not have a copy of the original source plans for the 2 mine entries in question but they are recorded in the official British Coal shaft register (of which we have a copy) and therefore we have a statutory duty to report on them.’

5.0 MINE SHAFT ASSESSMENT

There are two mine entries (327343-533) and (327343-527) within 20m of the site boundary.

No treatment details are known. It is therefore assumed that collapse of the shafts could occur, particularly when ground is disturbed and loadings are increased (i.e. as part of earthworks and construction work). Potential collapse is influenced by the ground conditions and can be dependent on the strength and thickness of superficial deposits, bedrock properties, connected mine entries and hydrogeology.

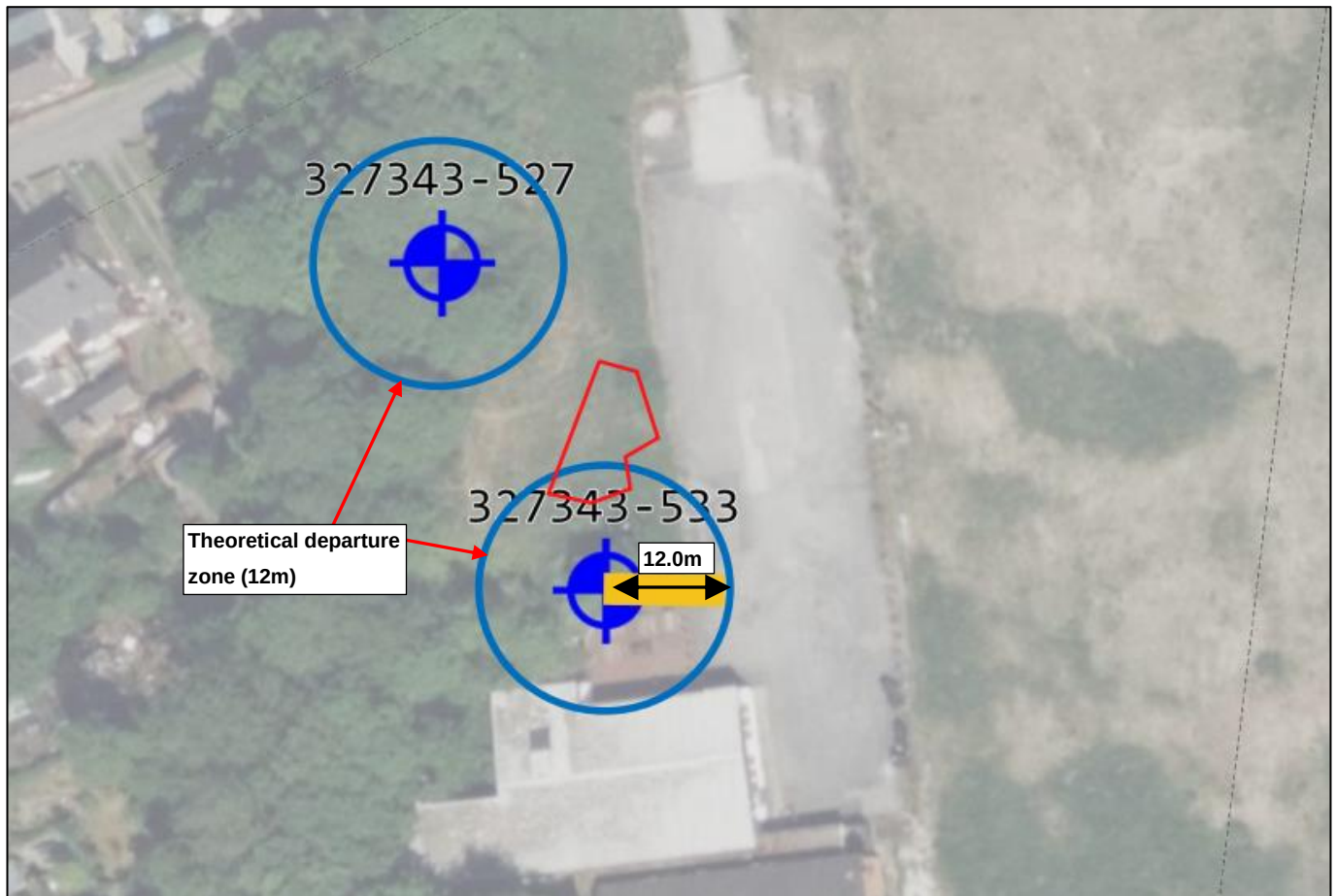


Plate 5.4 –Mine entries and their approximate location.

These shafts are assumed to have a 2.00m diameter and have been given a 10m departure zone due to inaccuracy of their location.

The departure zone of Shaft 327343-533 extends into the southern part of the playground area. Shaft 327343-527 does not extend into the site area, therefore is considered as a low risk.

While ground conditions onsite are unknown, historical mapping suggests that a substantial thickness of made ground may be present beneath the site.

However, it is understood that the whole of the car park and play area has been cement stabilised, with the old hardstanding removed and the underlying material crushed to a depth of between 150mm to 200mm before being mixed with a cement binder, levelled, and compacted.

No visual evidence of coal shafts or potential voids were noted during these works. The stabilised soil across the site area will help prevent the daylighting of any voids which migrate to the surface and help spread any loads potentially imposed above shaft locations.

Plate 5-1: Photograph of the site area with hardstanding removed.





Plate 5.3 – Photograph of the site area after concrete soil mixing.

6.0 RISK ASSESSMENT

Table 6.1 below summarises the potential risks associated with coal mining legacy for the site.

Coal Mining Issue	Potential Risk	Risk Assessment
Underground coal mining (recorded at shallow depths)	X	Known underground workings recorded by the Coal Authority. However, the shallowest workings recorded are at 49m depth. As such these are not considered to pose a risk of ground instability at the site surface. No further assessment required.
Underground coal mining (probable at shallow depths)	X	The Coal Authority does not note any probable worked shallow seams.
Mine entries (shafts / adits)	✓	Shafts are recorded within influencing distance of the site which may be present onsite. Watching brief during groundworks.
Coal mining geology (geological faults, fissures and breaklines)	X	No faults are present onsite that could contribute to surface subsidence damage as a consequence of underground coal mining.
Record of past mine gas emissions	X	Not recorded on Coal Authority data, and while a risk of elevated gas levels may be possible in an area of coal mining the development does not include confined spaces or underground rooms that would allow a build up of gas.
Recorded coal mining surface hazard	X	No recorded coal mining surface hazard.
Surface mining (opencast workings)	X	No recorded surface mining (opencast workings).

7.0 RECOMMENDATIONS

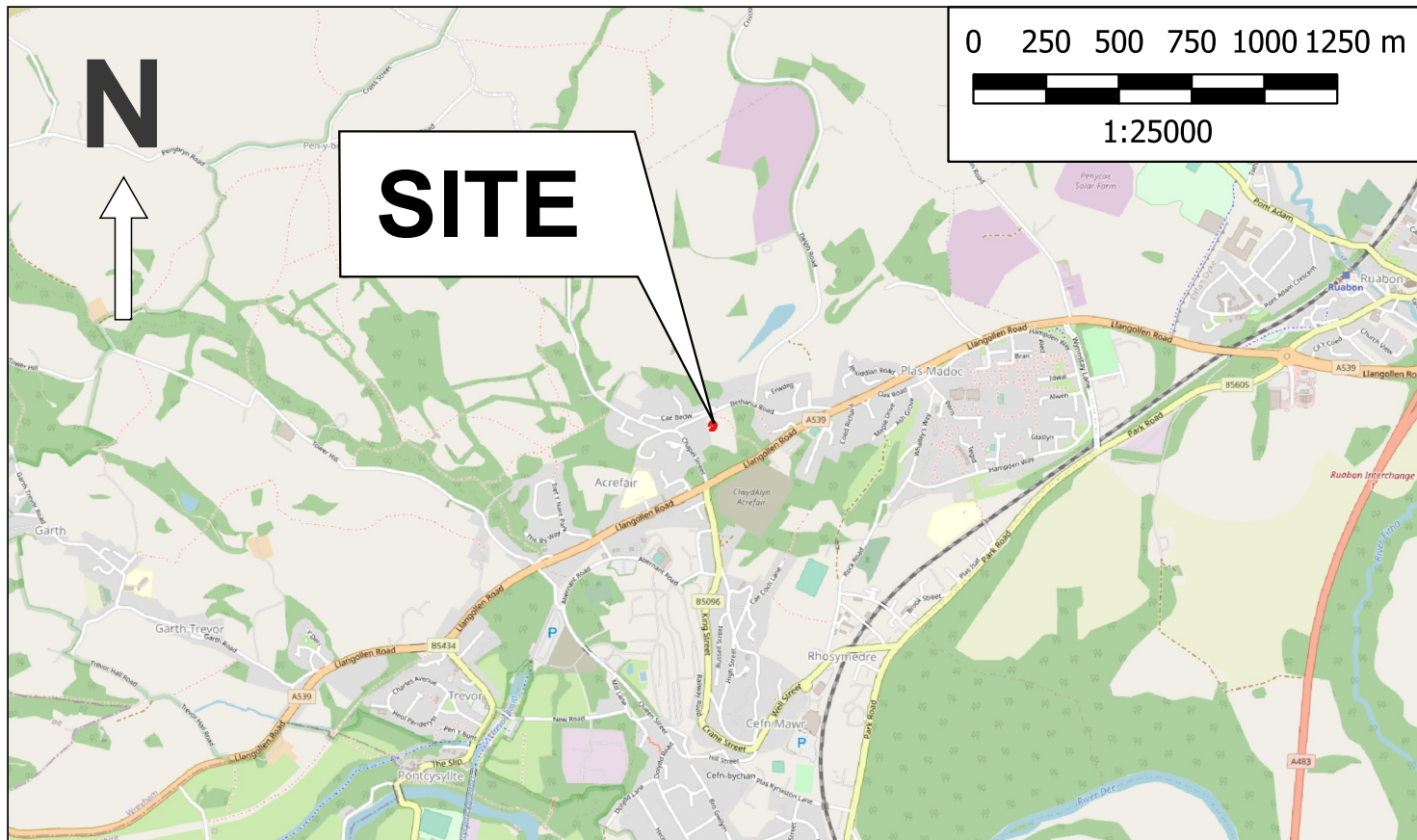
It should be noted that the Coal Authority, in an email dated 2nd June 2023 with regards to planning application P/2023/0258, state that with regards to the site:

‘This type of development falls on our published exemptions list due to the minimal groundworks necessary to facilitate its installation on site. However, the mine entries do pose a potential public safety risk to those utilising this play area, which is of significant concern. If you are aware that significant groundworks were required to facilitate the installation of the two pieces of play equipment, then please let me know as we may wish to review our response.’

Although, there is the potential risk from a coal mine entry 327343-533 close to the site, Groundsolve consider the risk is low enough for the playground landuse for the following reasons.

- The playground construction will provide a nominal load to the ground.
- The playground is not located directly over the mine shaft location, however the uncertainty around the shaft position does mean there is potential for the shaft to be located within the southern corner.
- The mine entry is not recorded on any historical or geological mapping. The presence of the mine shaft is potentially erroneous.
- Made Ground and thin Glacial Till is anticipated to be present on site, however the depth to rockhead is considered to be relatively shallow.
- No visual evidence of any coal shafts or potential voids were noted during the recent groundworks.
- The whole of the car park and play area has been concrete stabilised, with the old hardstanding removed and the underlying material crushed to a depth of between 150mm to 200mm before being mixed with concrete, compacted and levelled. The concrete stabilised soil across the site area will help prevent the daylighting of any voids which migrate to the surface and help spread any loads potentially imposed above shaft location.
- Land use by individuals will be periodic and of short duration.

DRAWINGS



KEY



Site Location

(C) OpenStreetMap Contributors

Sampling locations and features annotated are approximate and are based upon observed measurements unless otherwise stated. Do not scale from this drawing and work from marked dimensions only. All dimensions and features should be confirmed on site by the Contractor.

Client: JW Conrtactors Ltd				Title: Site Location and Boundary		
Site: The Delph, Bethania Road, Wrexham				 GroundSolve Ltd Consulting Geotechnical Engineers		
Job No.: GSL 2939	Drawn By: PW	Checked By: SI	Drawn: June 2023	Scale (see scale bar): 1:25,000 @ A4 1:500 @ A4	Figure: 1	Revision:

Project Id: 2939

Project Title: The Delph Bar and Restaurant, Acrefair

Location: The Delph Bar and Restaurant, Acrefair, Wrexham, LL14 3TY

Client:

Title: Site Plan

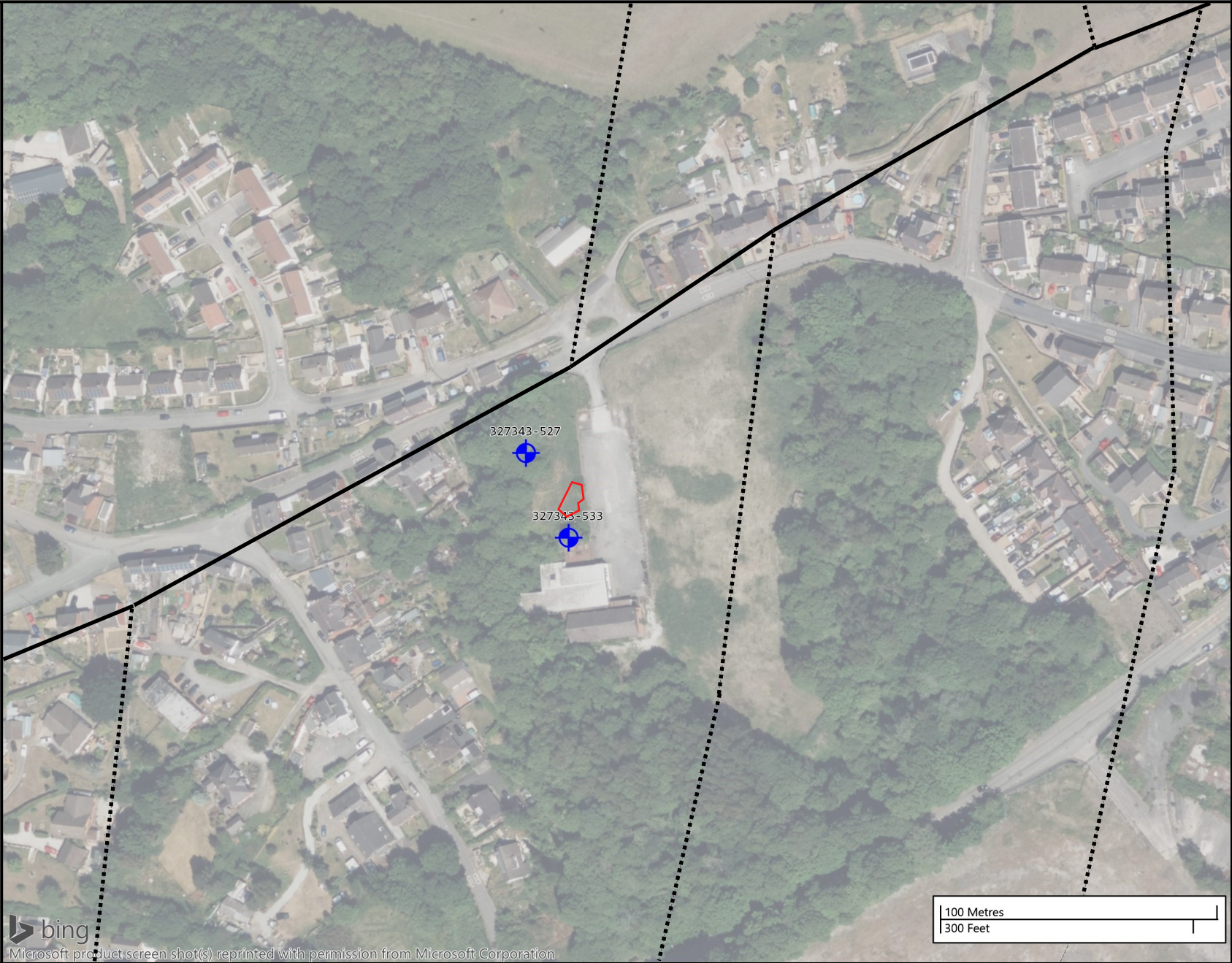
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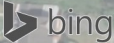
Engineer:

Contractor:

Legend Key

 Locations By Type - Mine Shaft



 bing

Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

100 Metres

300 Feet

APPENDIX A – HISTORIC MAPPING

Site Details:

THE DELPH, SPORTS AND
SOCIAL CLUB, BETHANIA
ROAD, ACREFAIR, WREXHAM,
LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: County Series

Map date: 1873-1875

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
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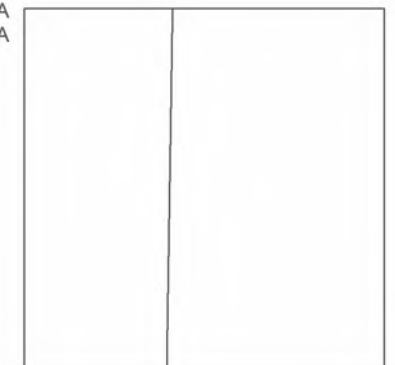
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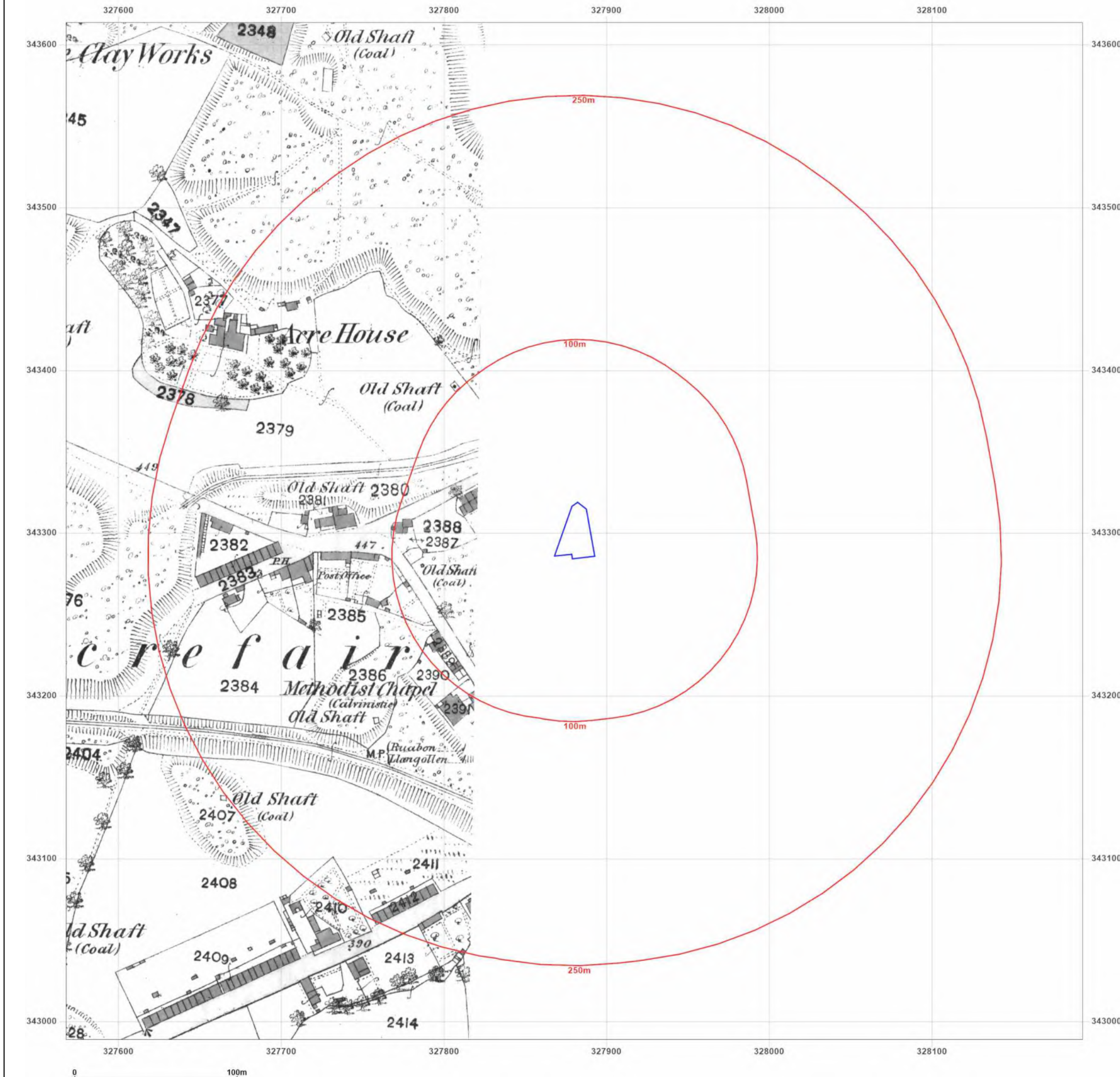


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Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: County Series

Map date: 1899

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: County Series

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Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1962-1963

Scale: 1:2,500

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Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1972-1977

Scale: 1:2,500

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Client Ref: 2939
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Map Name: National Grid

Map date: 1972-1977

Scale: 1:2,500

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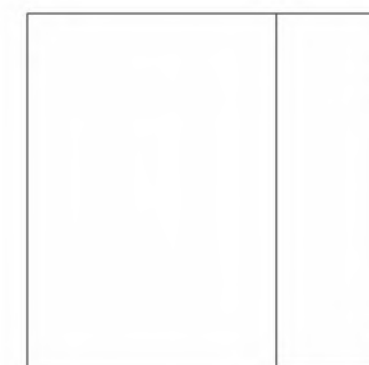
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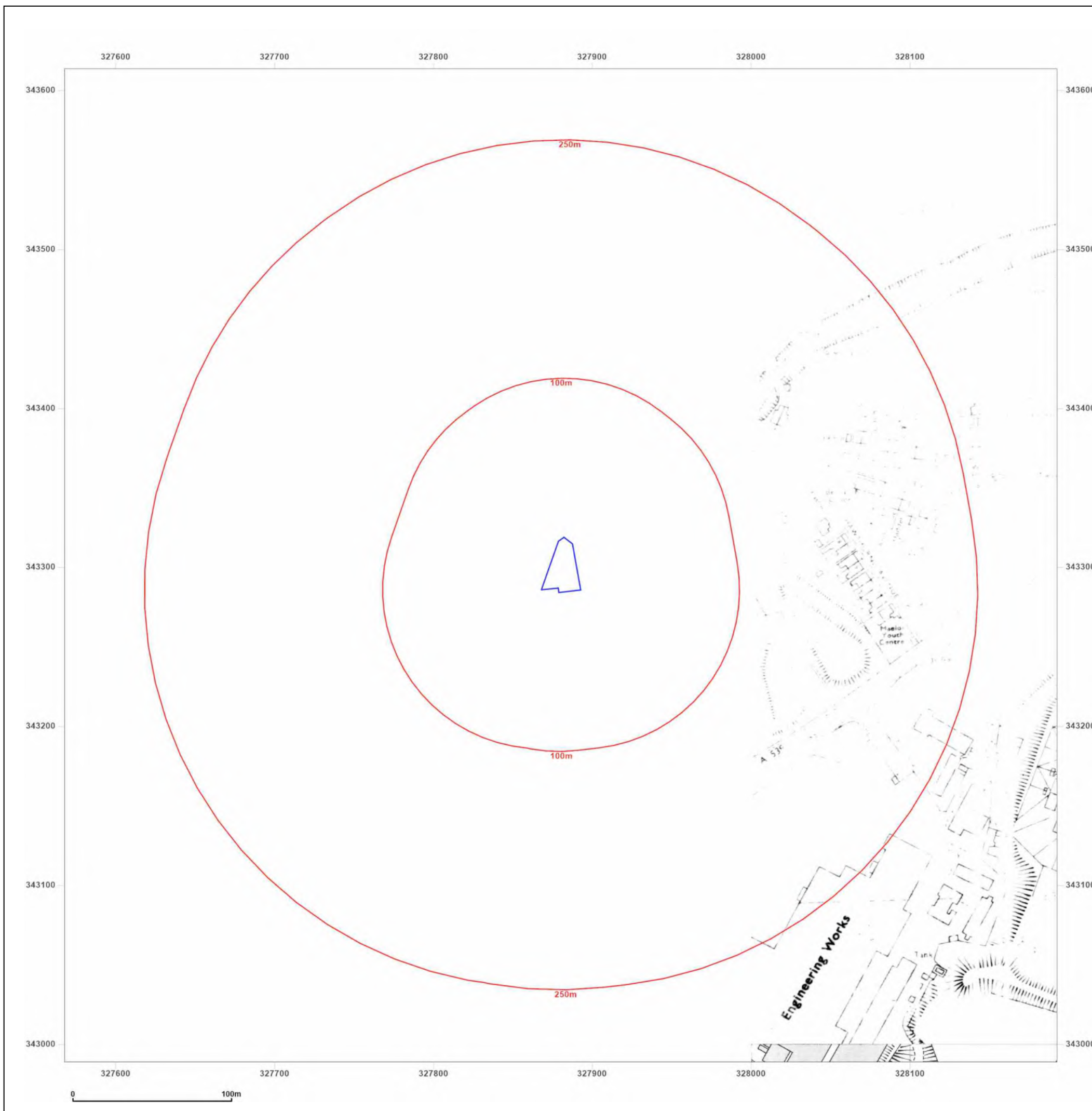


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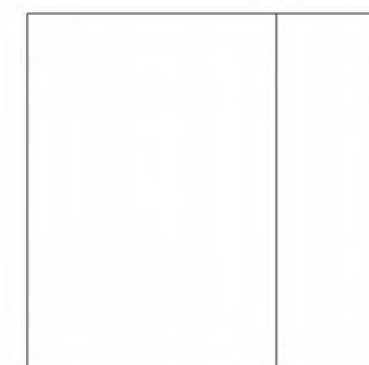
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Map date: 1978-1980

Scale: 1:2,500

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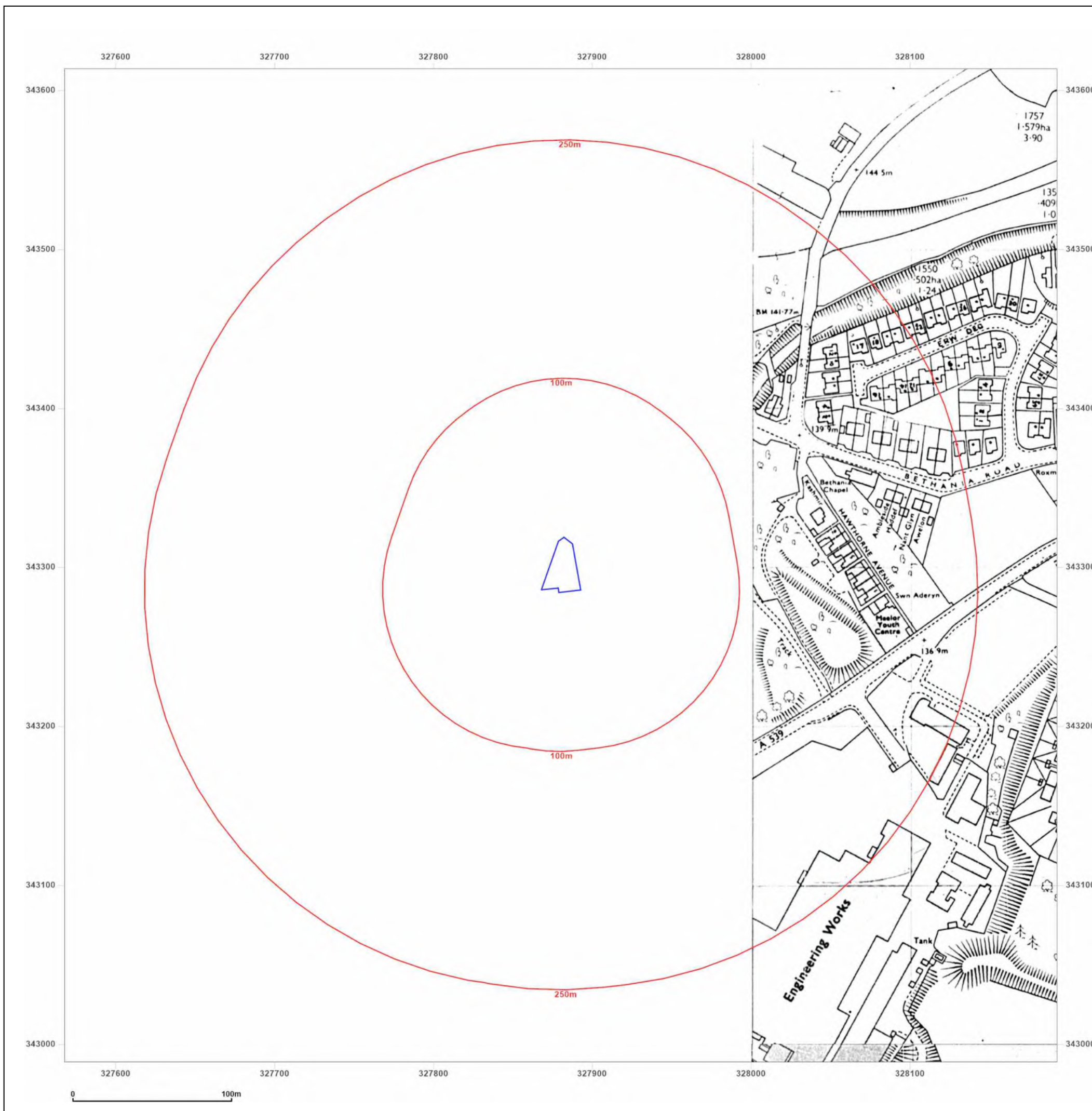


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Client Ref: 2939
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Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1988-1991

Scale: 1:2,500

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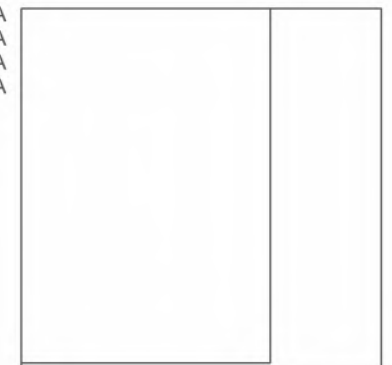
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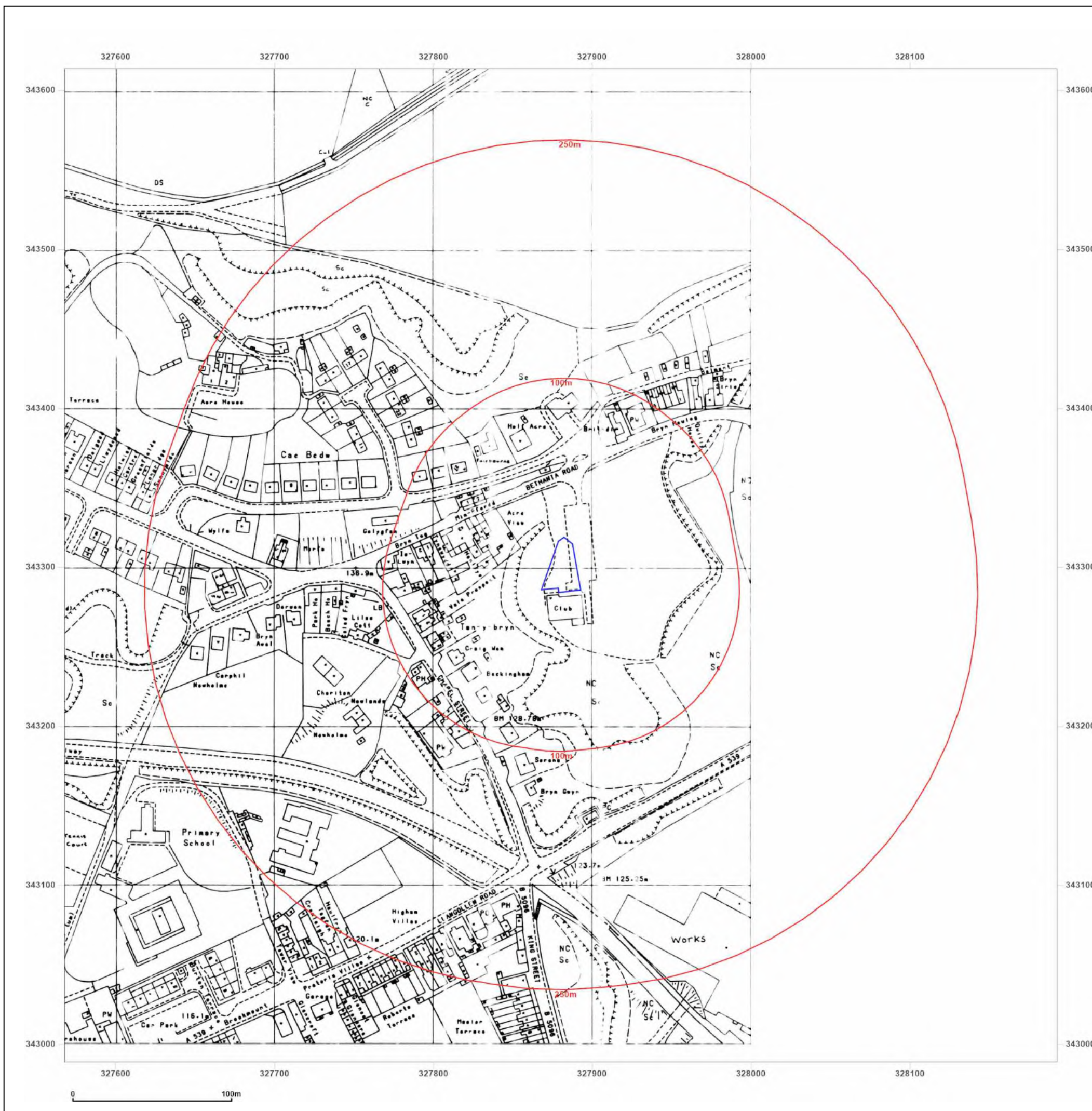


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Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1991-1994

Scale: 1:2,500

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ROAD, ACREFAIR, WREXHAM,
LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1992-1994

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1992
Revised 1992
Edition N/A
Copyright 1992
Levelled N/A

Surveyed 1994
Revised N/A
Edition N/A
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Surveyed N/A
Revised N/A
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LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
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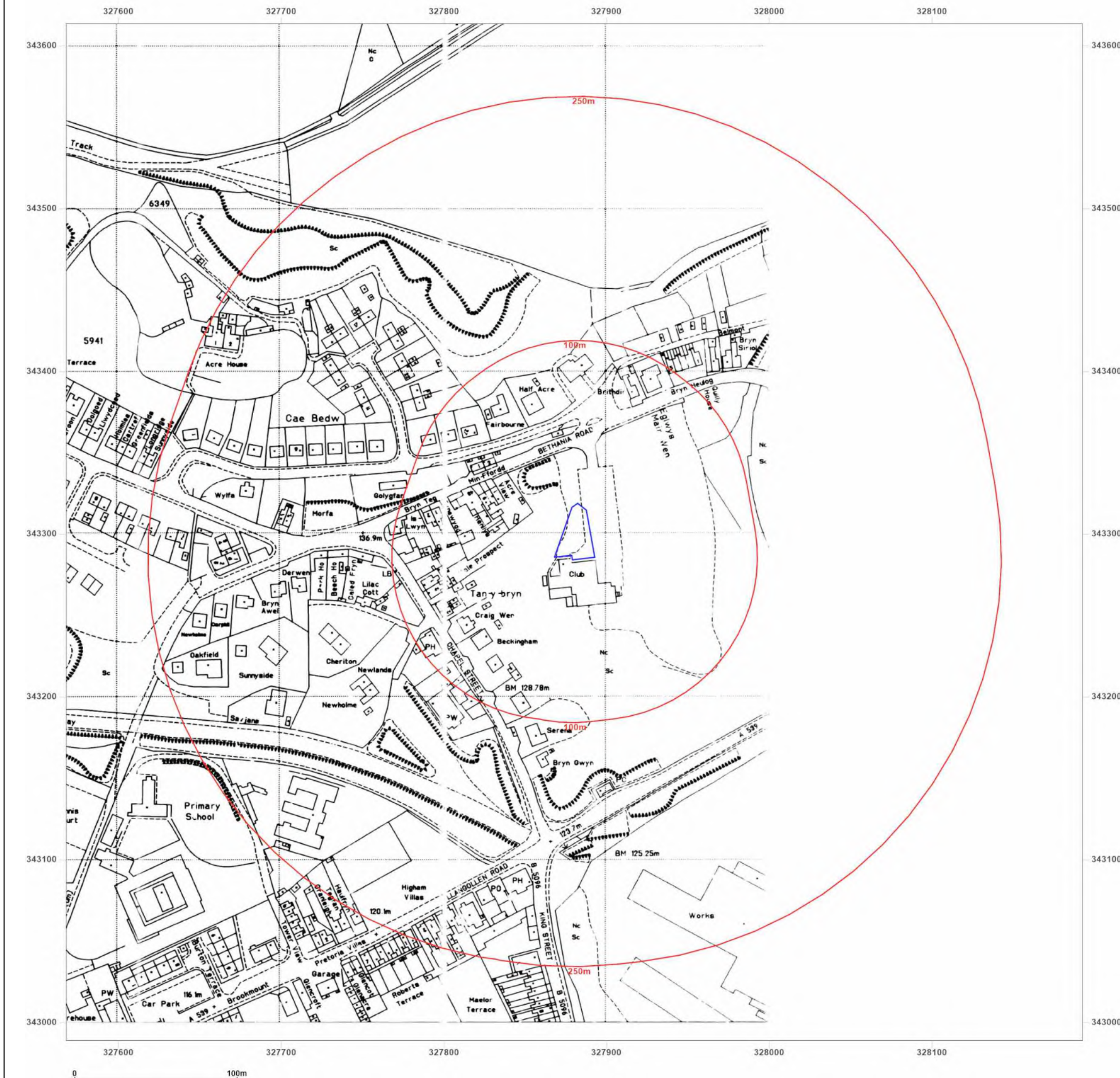


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LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: County Series

Map date: 1873

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1873
Revised 1873
Edition N/A
Copyright N/A
Levelled N/A

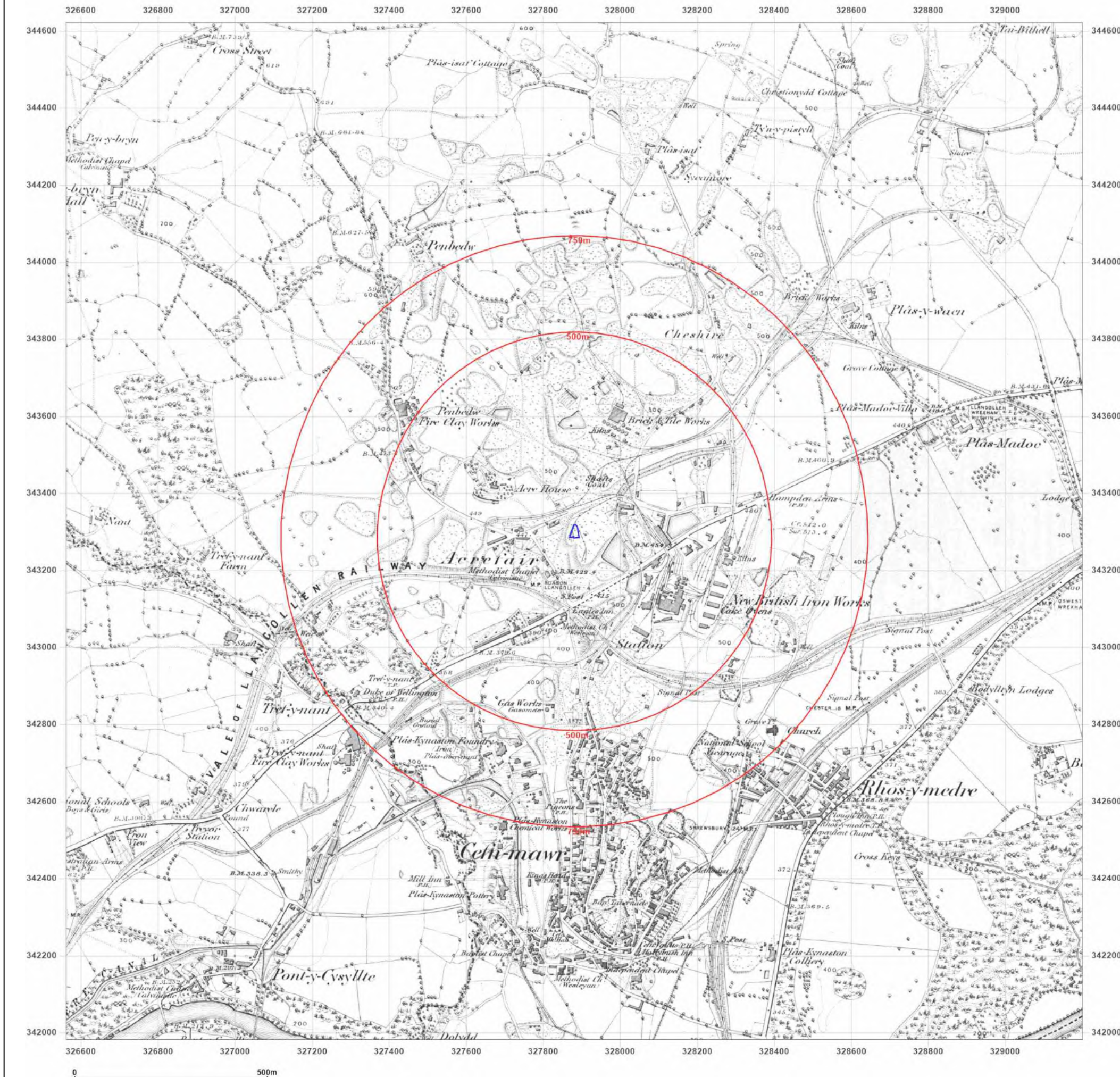


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LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: County Series

Map date: 1898

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1873
Revised 1898
Edition N/A
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Levelled N/A

Surveyed 1872
Revised 1898
Edition N/A
Copyright N/A
Levelled N/A

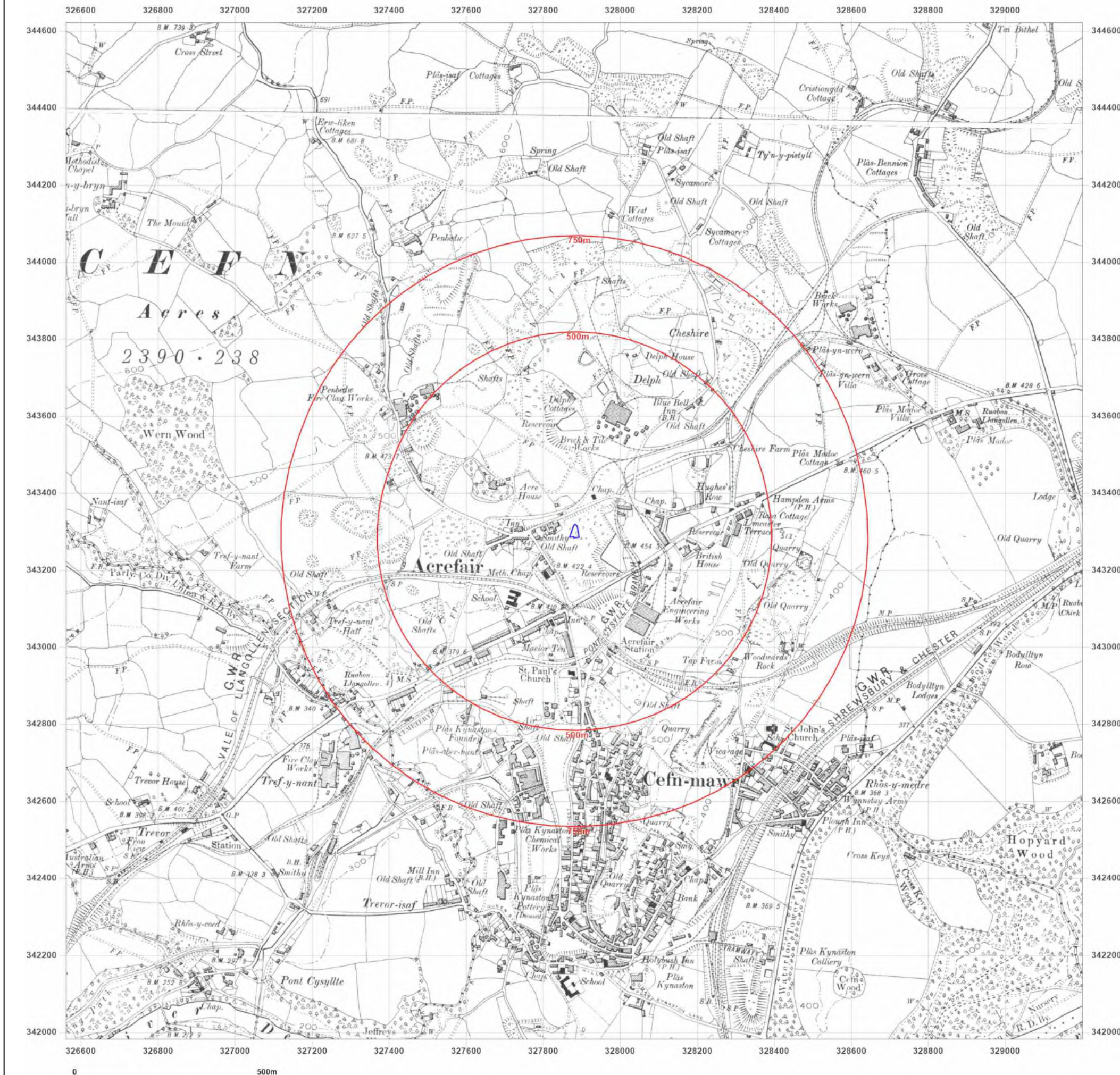


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ROAD, ACREFAIR, WREXHAM,
LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: County Series

Map date: 1909-1910

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1872
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1872
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

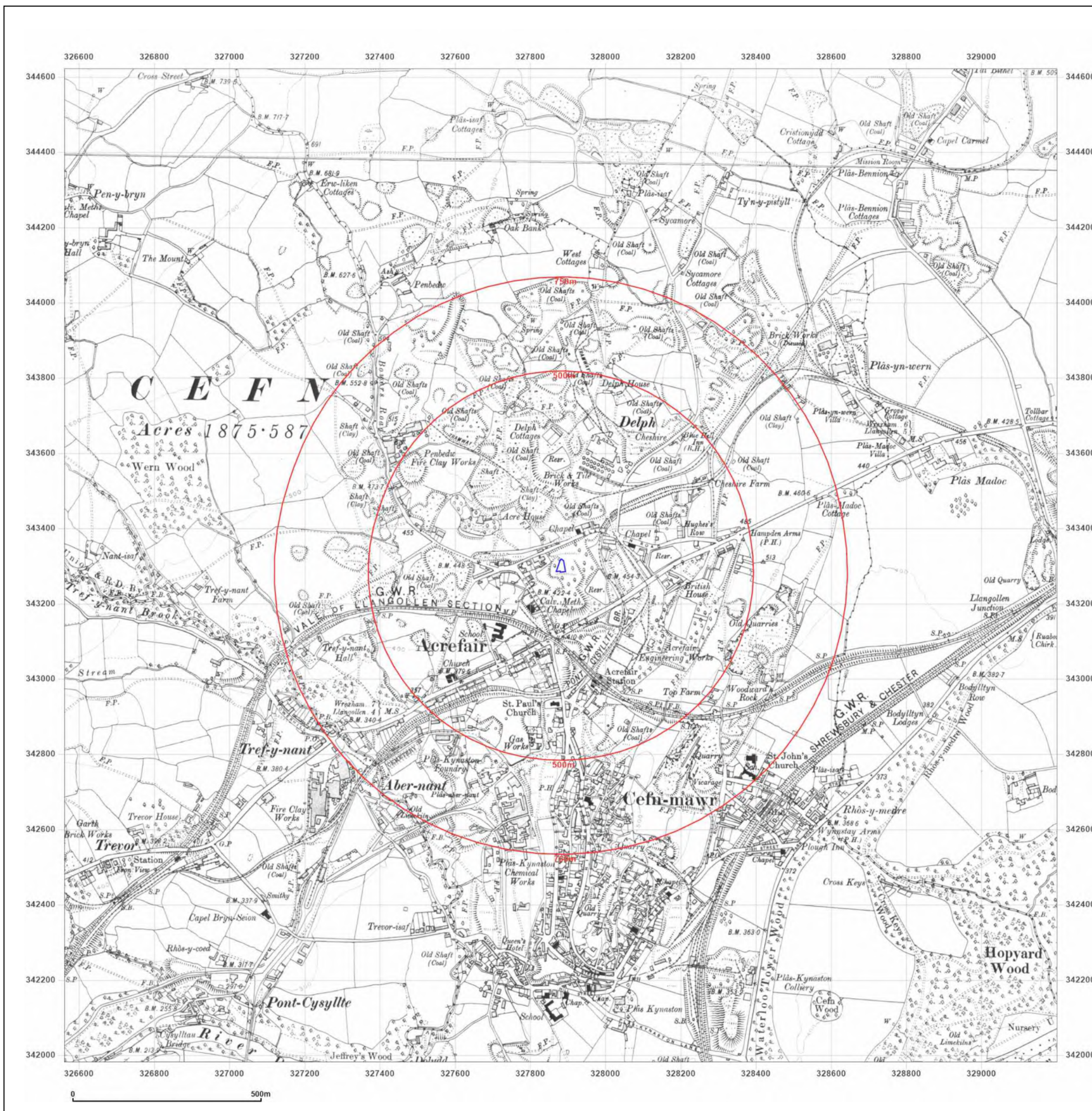


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LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1872
Revised 1938
Edition 1938
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Revised 1938
Edition 1938
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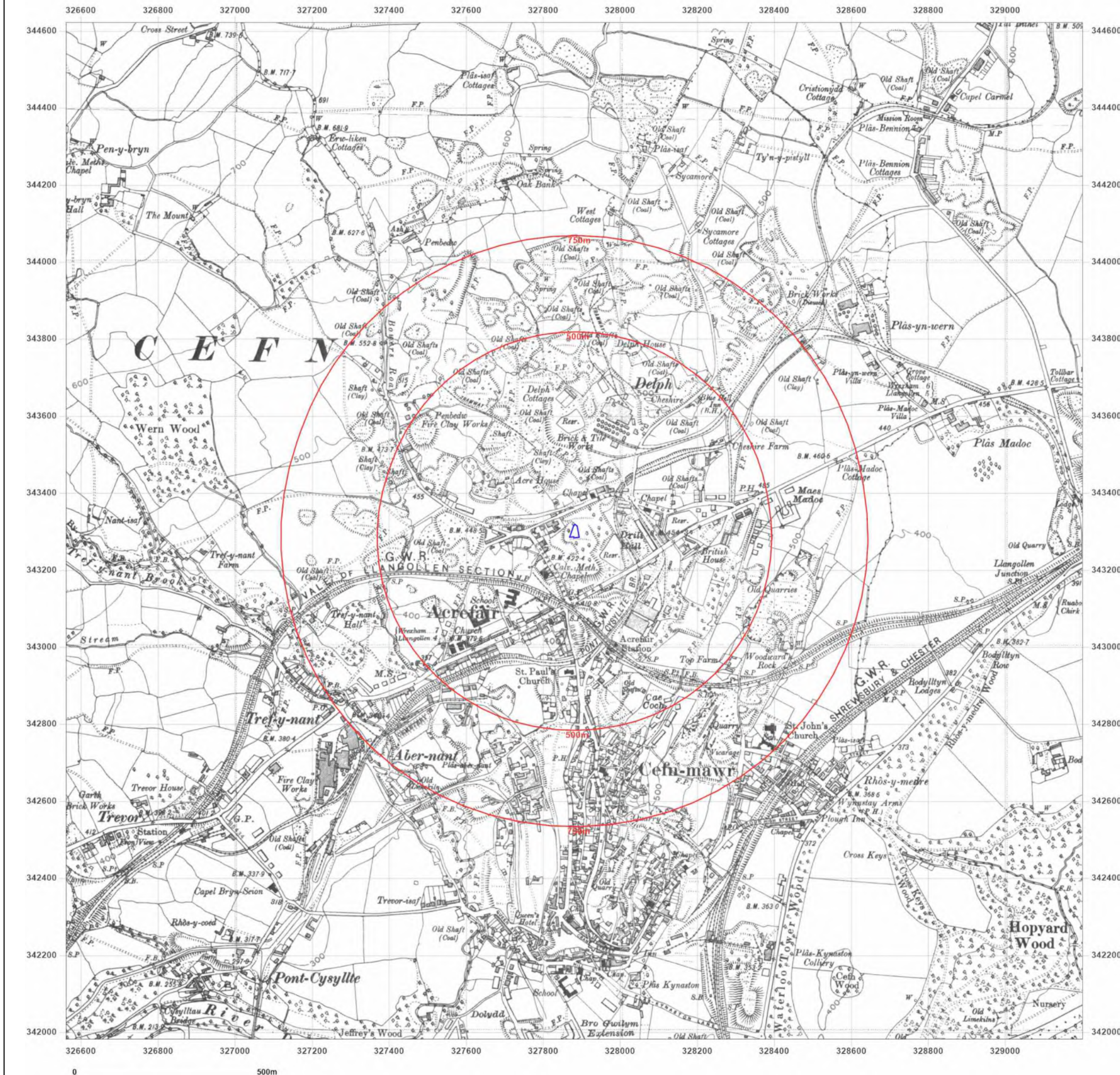


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Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: Provisional

Map date: 1960

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1960
Revised 1960
Edition N/A
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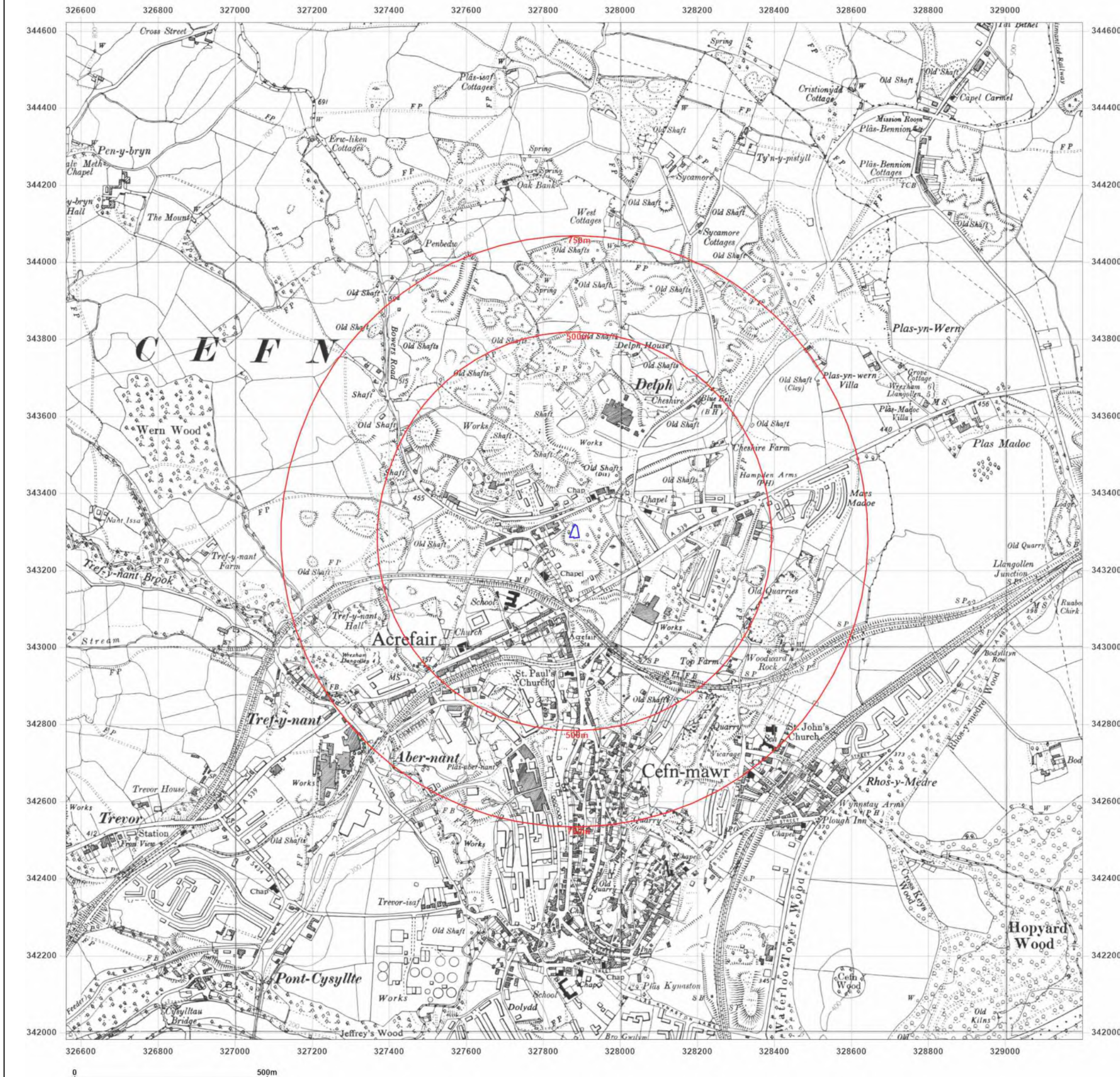


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LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1985

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1971
Revised 1985
Edition N/A
Copyright N/A
Levelled N/A

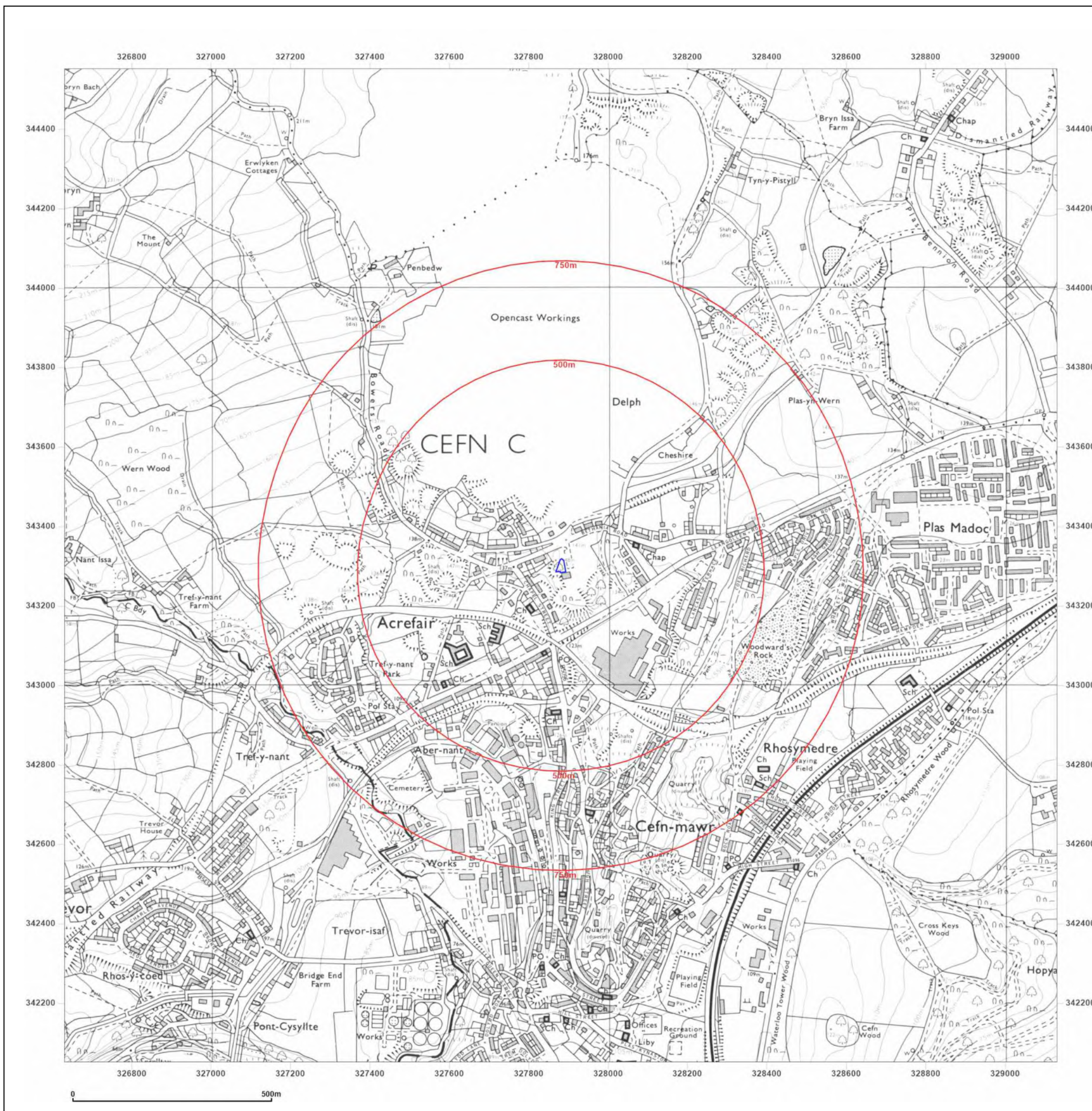


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LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 1994

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1971
Revised 1994
Edition N/A
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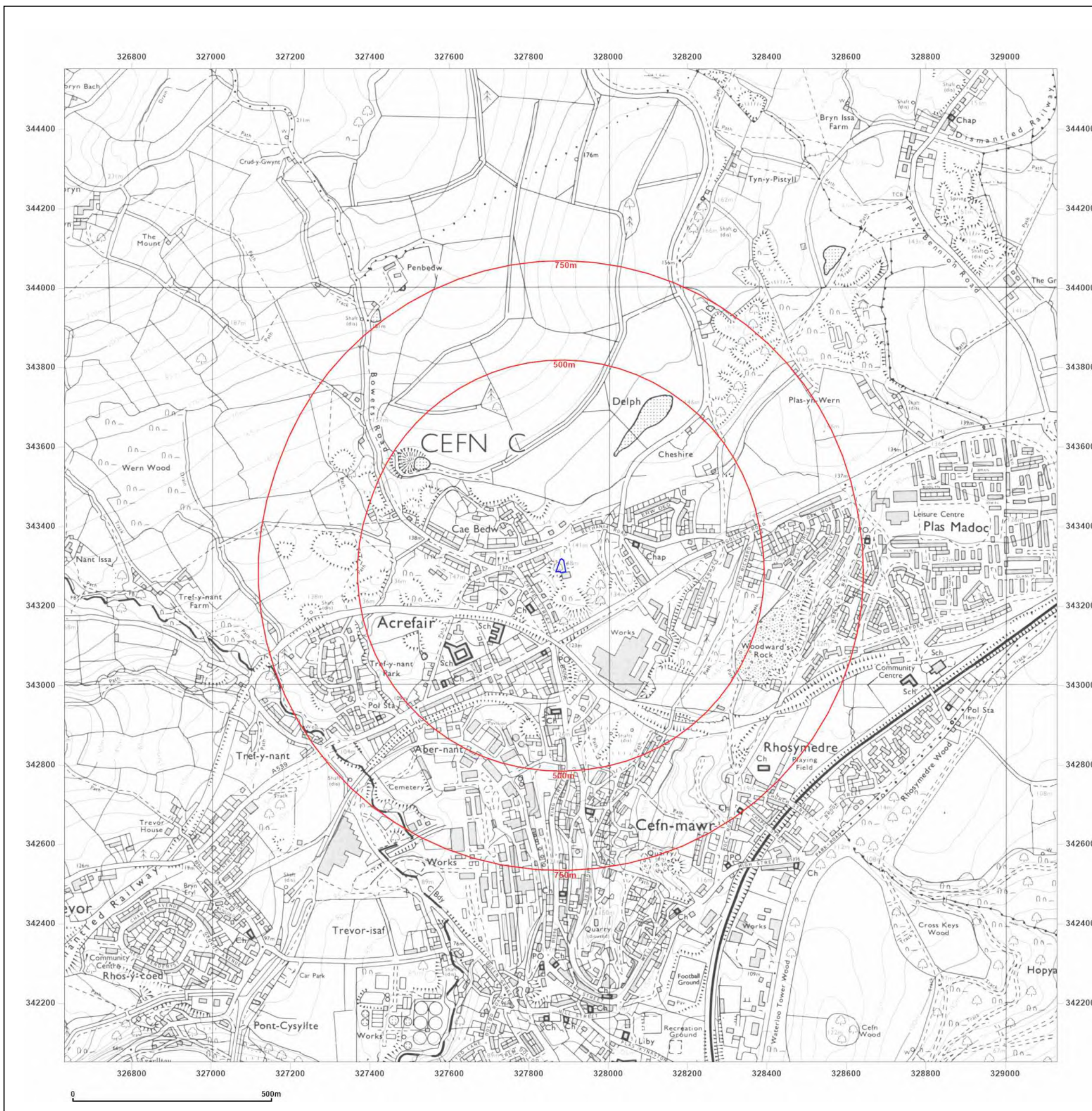


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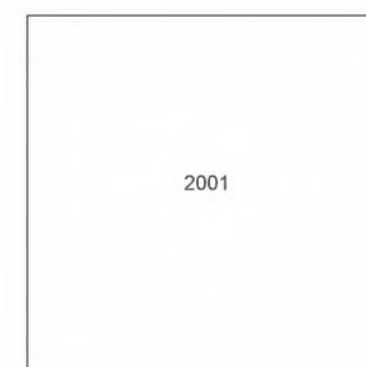
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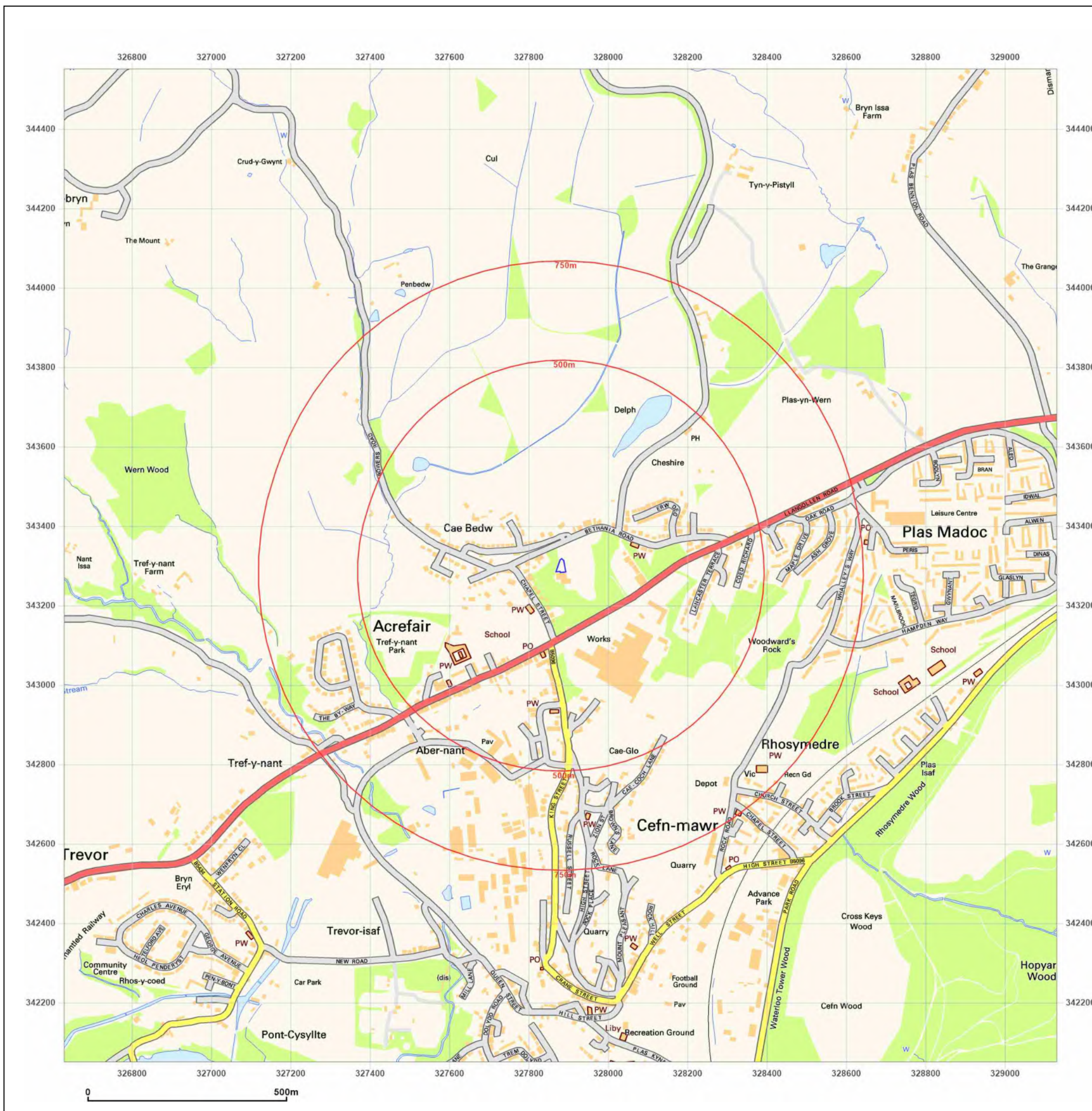


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ROAD, ACREFAIR, WREXHAM,
LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010

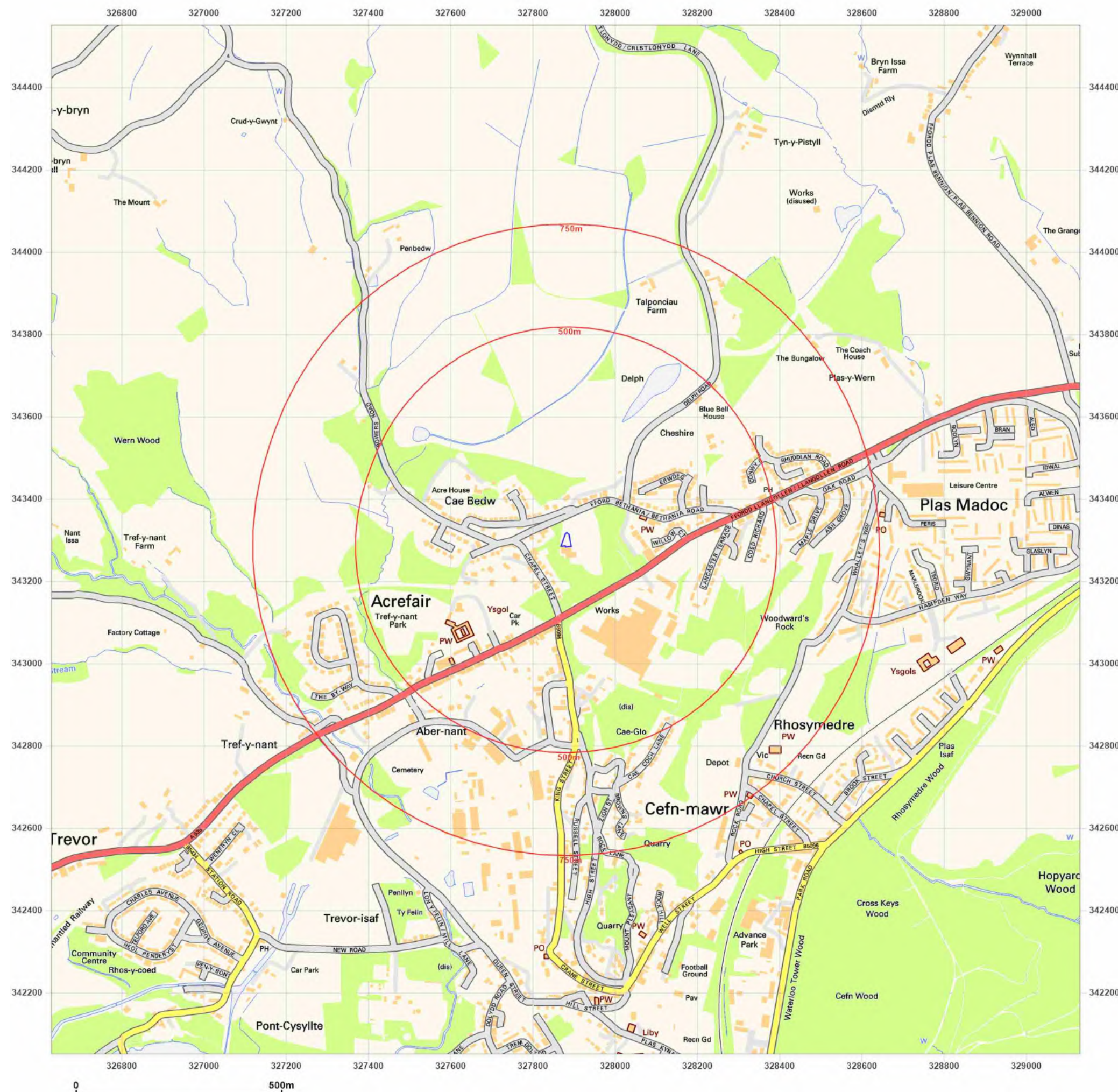


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LL14 3TR

Client Ref: 2939
Report Ref: GS-FWN-C4Z-41J-5H9
Grid Ref: 327880, 343301

Map Name: National Grid

Map date: 2023

Scale: 1:10,000

Printed at: 1:10,000



2023

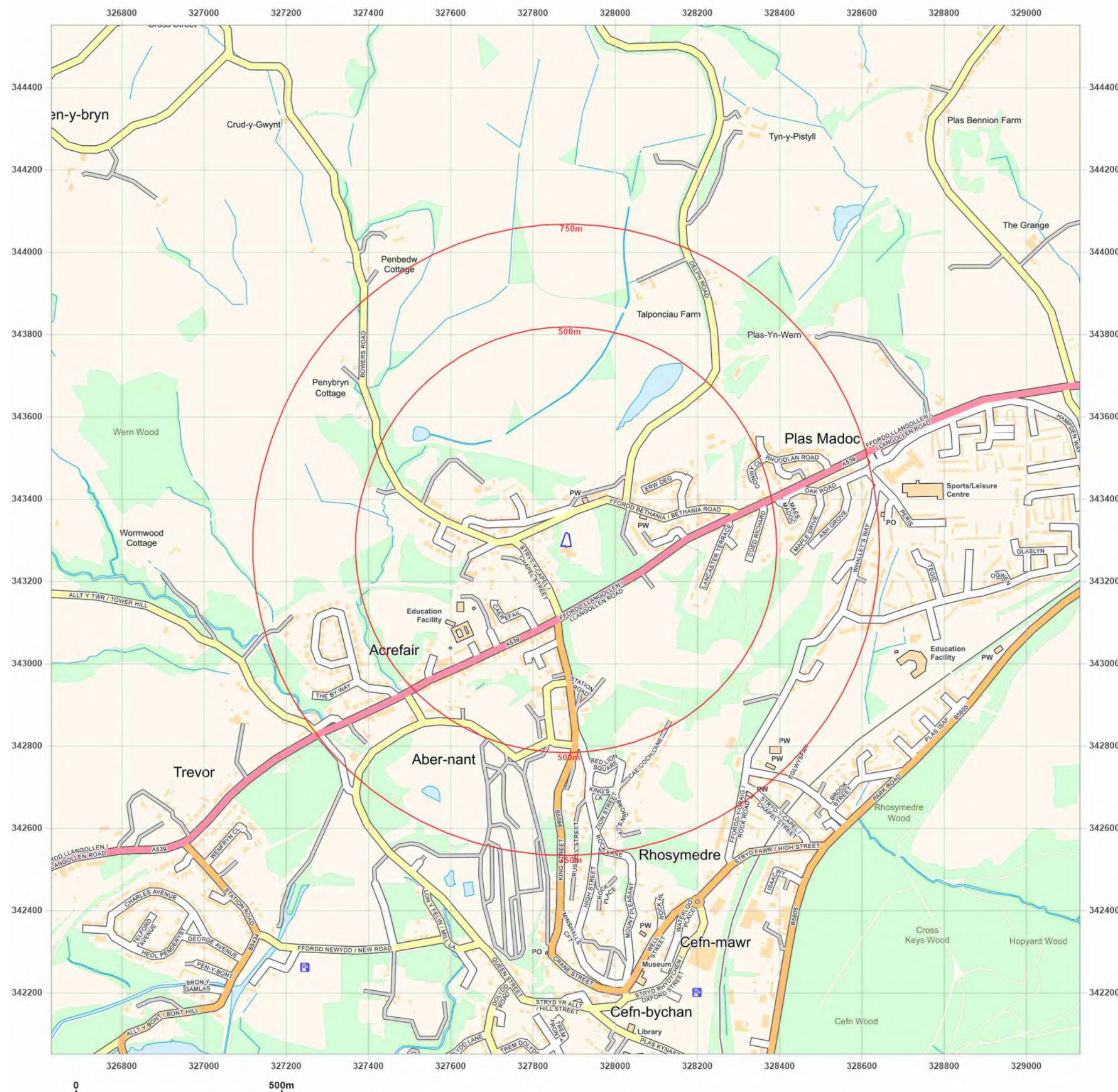


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APPENDIX B – CONSULTANTS MINING REPORT

Consultants

Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GROUNDSURE LIMITED

Enquiry address

The Delph, Sports And Social Club, Bethania Road,
Acrefair, Wrexham
Wrexham
LL14 3TR

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

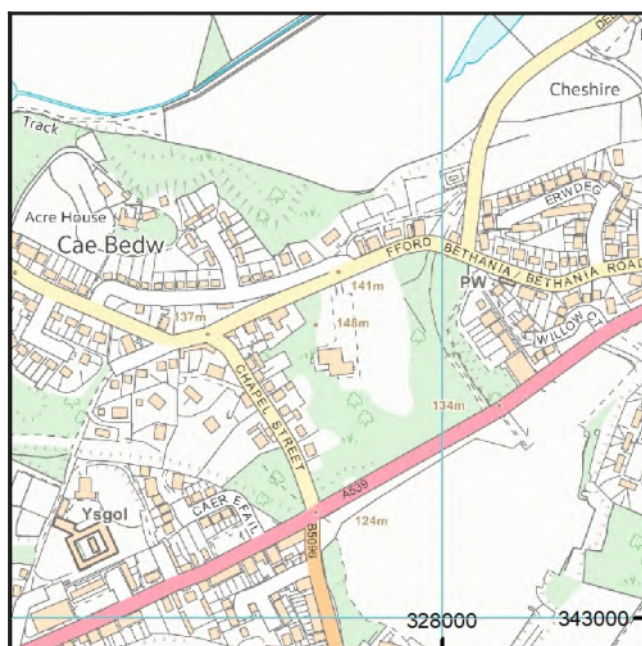
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
ACREFAIR/RUAB ON	FIRECAMP	Coal	A0PD	49	North-West	8.1	South-East	200	1880
ACREFAIR/RUAB ON	FIRECAMP	Coal	A0PE	55	South-East	8.1	South-East	200	1880
unnamed	STONE	Coal	38VM	60	North	8.1	South-East	60	1912

Probable unrecorded shallow workings

None.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	327343-115	327878 343396		Coal	
Shaft	327343-198	327787 343281		Coal	
Shaft	327343-199	327951 343297		Coal	
Shaft	327343-383	327833 343221		Coal	
Shaft	327343-403	327813 343204		Coal	
Shaft	327343-526	327944 343371		Coal	
Shaft	327343-527	327866 343328		Coal	
Shaft	327343-532	327909 343224		Coal	
Shaft	327343-533	327881 343297		Coal	

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

2334	5916	14884
NW1411	NW1503	16713
17956	0	NW1423

Our records show we have more plans than those shown above which could affect the enquiry boundary.

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

No outcrops recorded.

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

Please refer to the “Summary of findings” map (on separate sheet) for details of any opencast areas within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

None recorded within 50 metres of the enquiry boundary.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk**.

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices

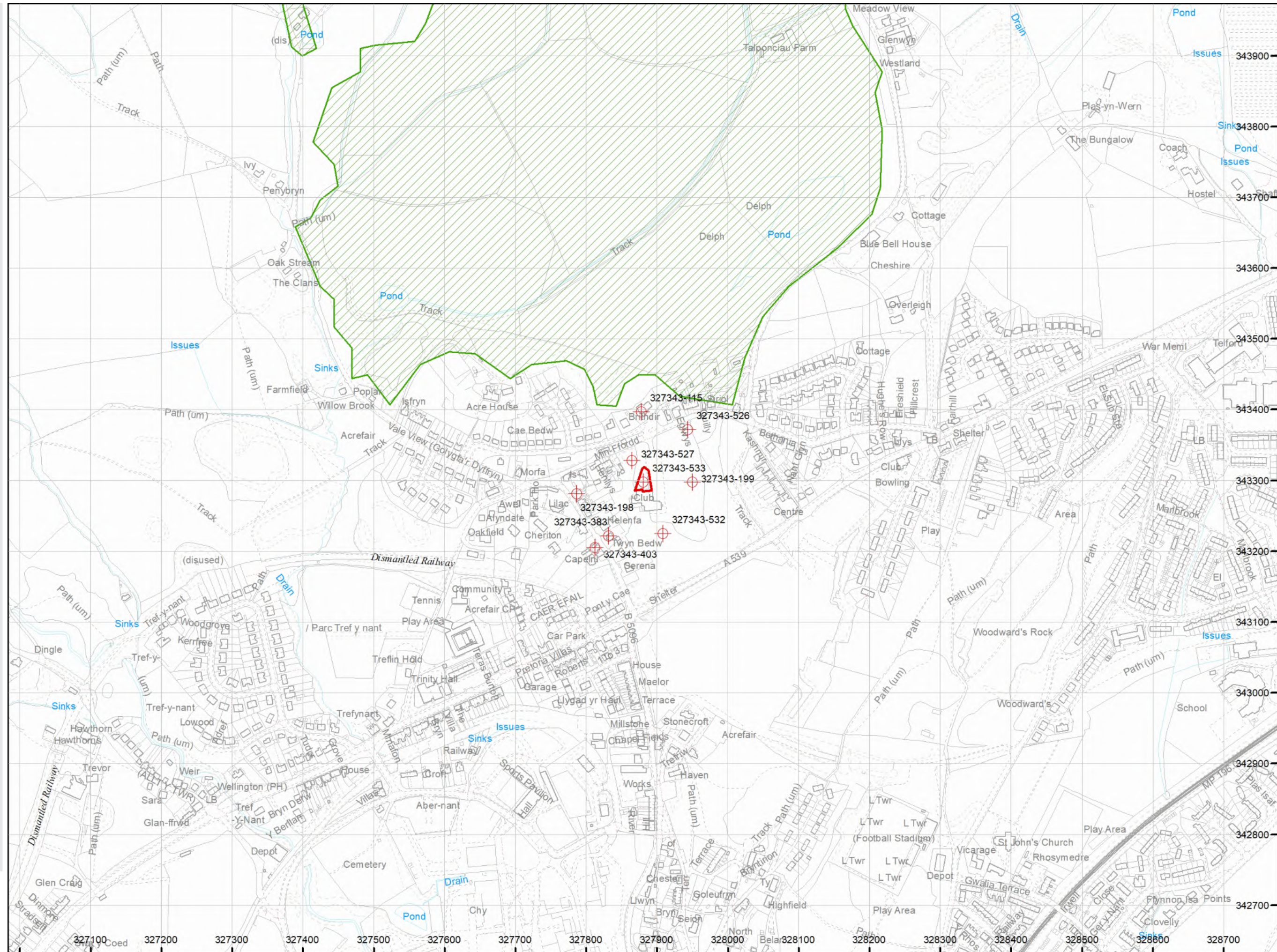
Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

Key

Approximate position of the enquiry boundary shown	
Disused mine shaft	
Unlicensed opencast site	



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+44 (0)1623 637 000 (International)
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