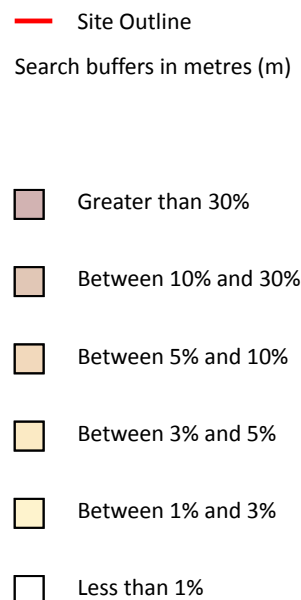
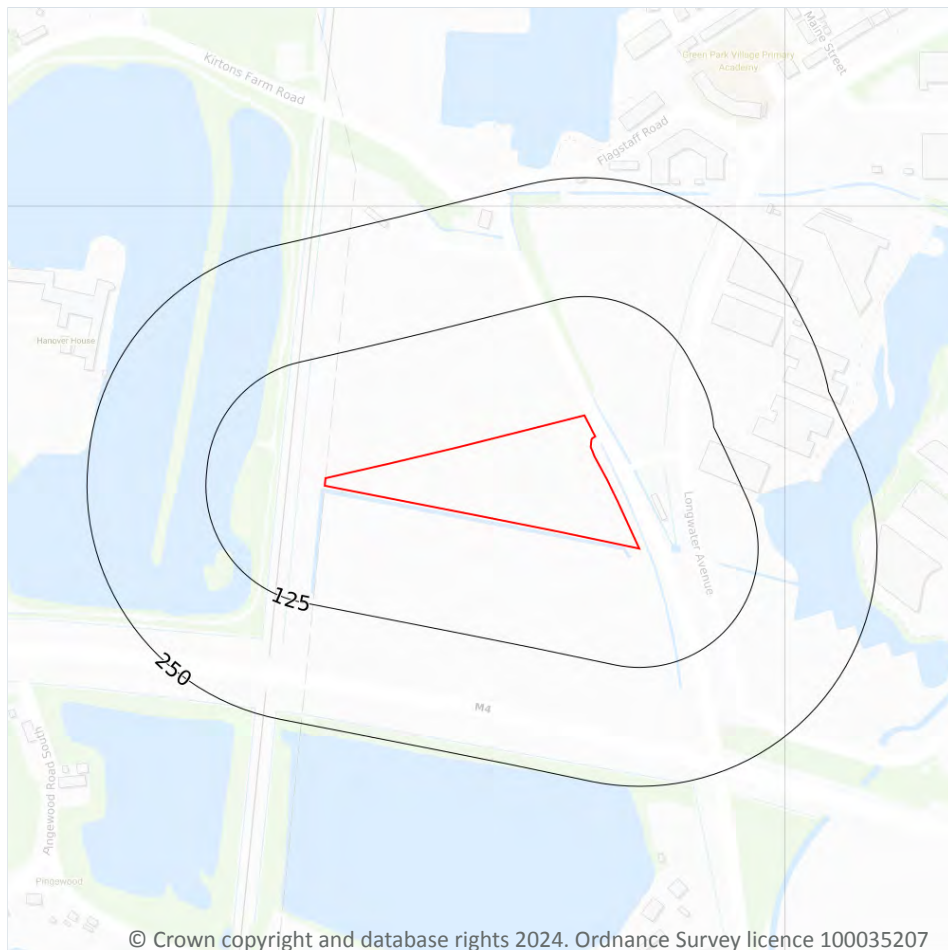


20 Radon



20.1 Radon

Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 126 >](#)

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



This data is sourced from the British Geological Survey and UK Health Security Agency.



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
16m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

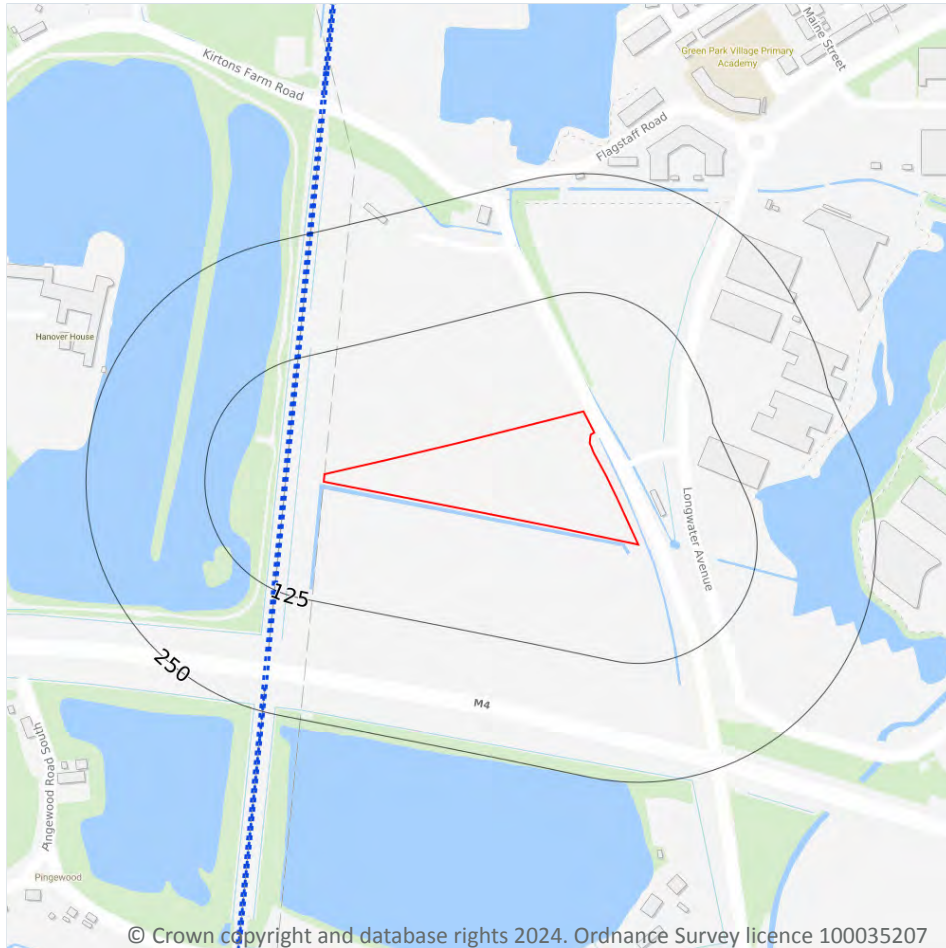
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The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m

0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

4

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on [page 129](#) >



Location	Name	Type
39m W	Reading to Basingstoke Line	rail
40m W	Not given	Multi Track
42m W	Reading to Basingstoke Line	rail
225m SW	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

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Site Details:

Green Park, Reading

Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES_2500
Grid Ref: 469681, 169709

Map Name: County Series

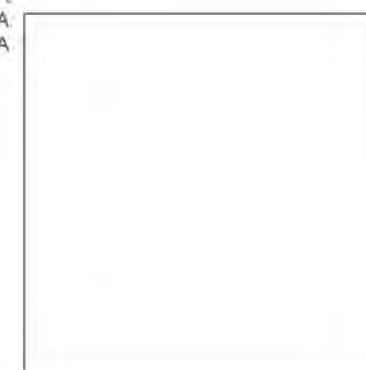
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Scale: 1:2,500

Printed at: 1:2,500



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

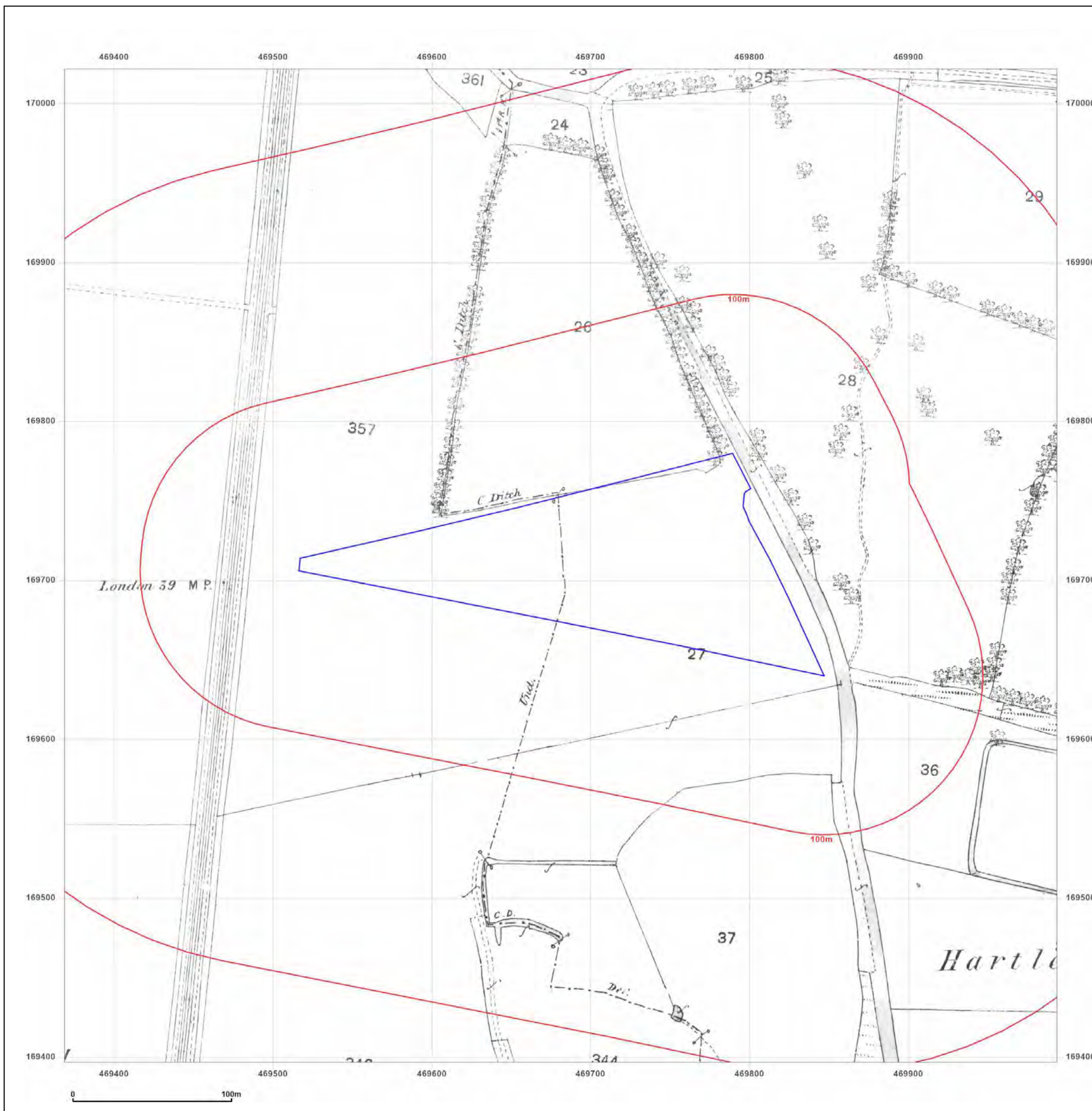


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Site Details:

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Grid Ref: 469681, 169709

Map Name: County Series

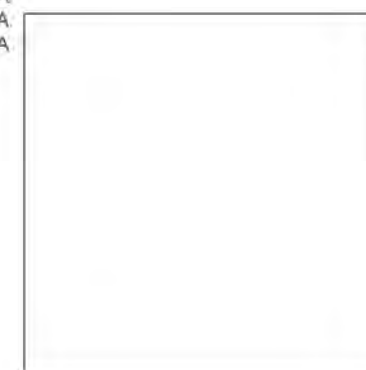
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Revised 1872
Edition N/A
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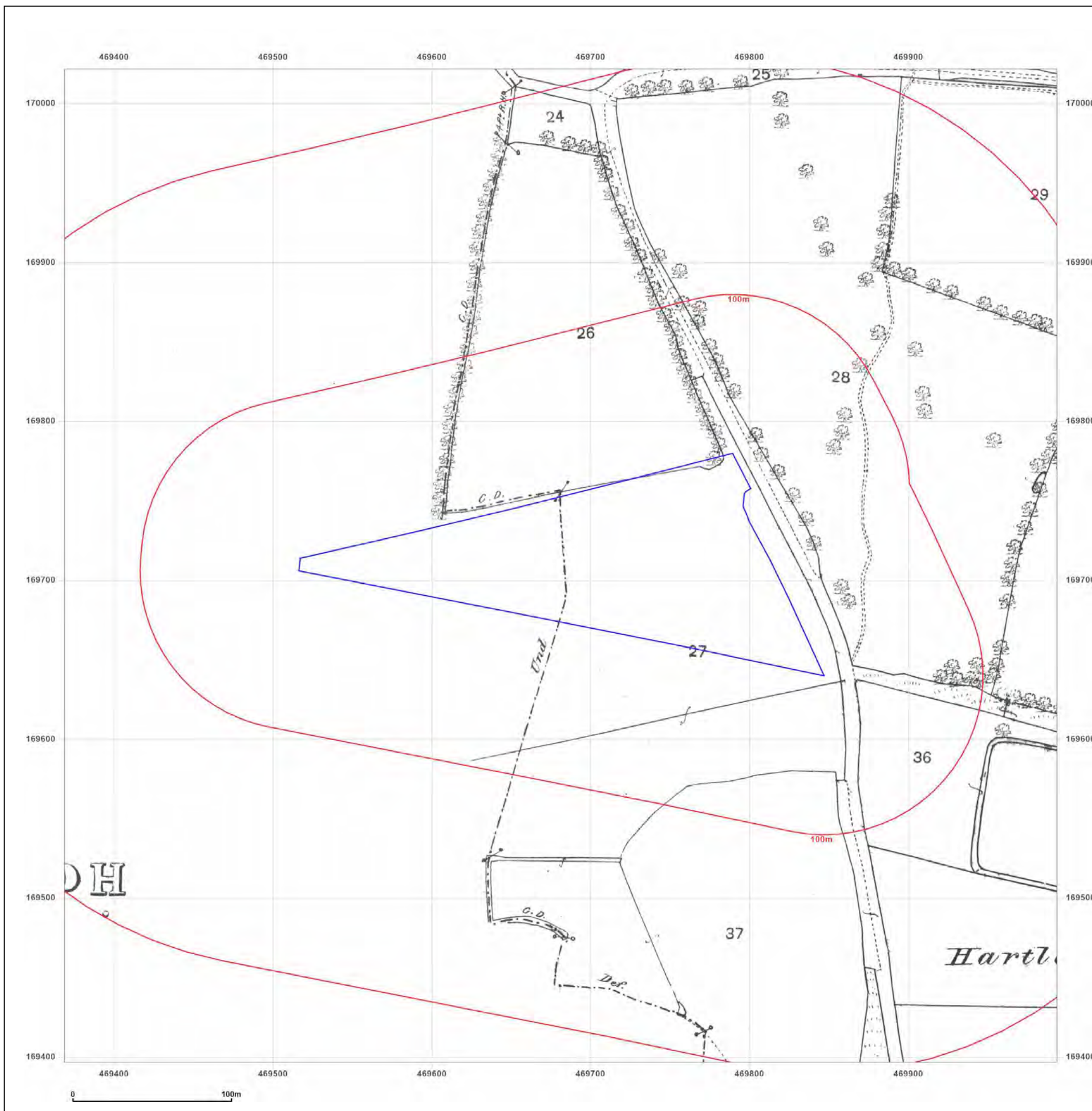


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Grid Ref: 469681, 169709

Map Name: County Series

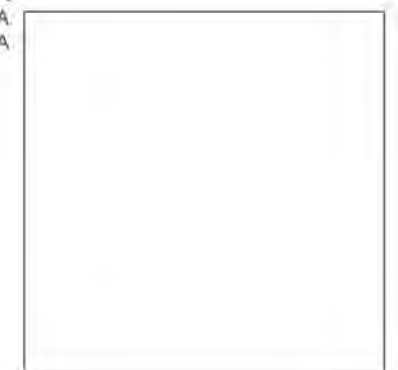
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Surveyed 1877
Revised 1877
Edition N/A
Copyright N/A
Levelled N/A

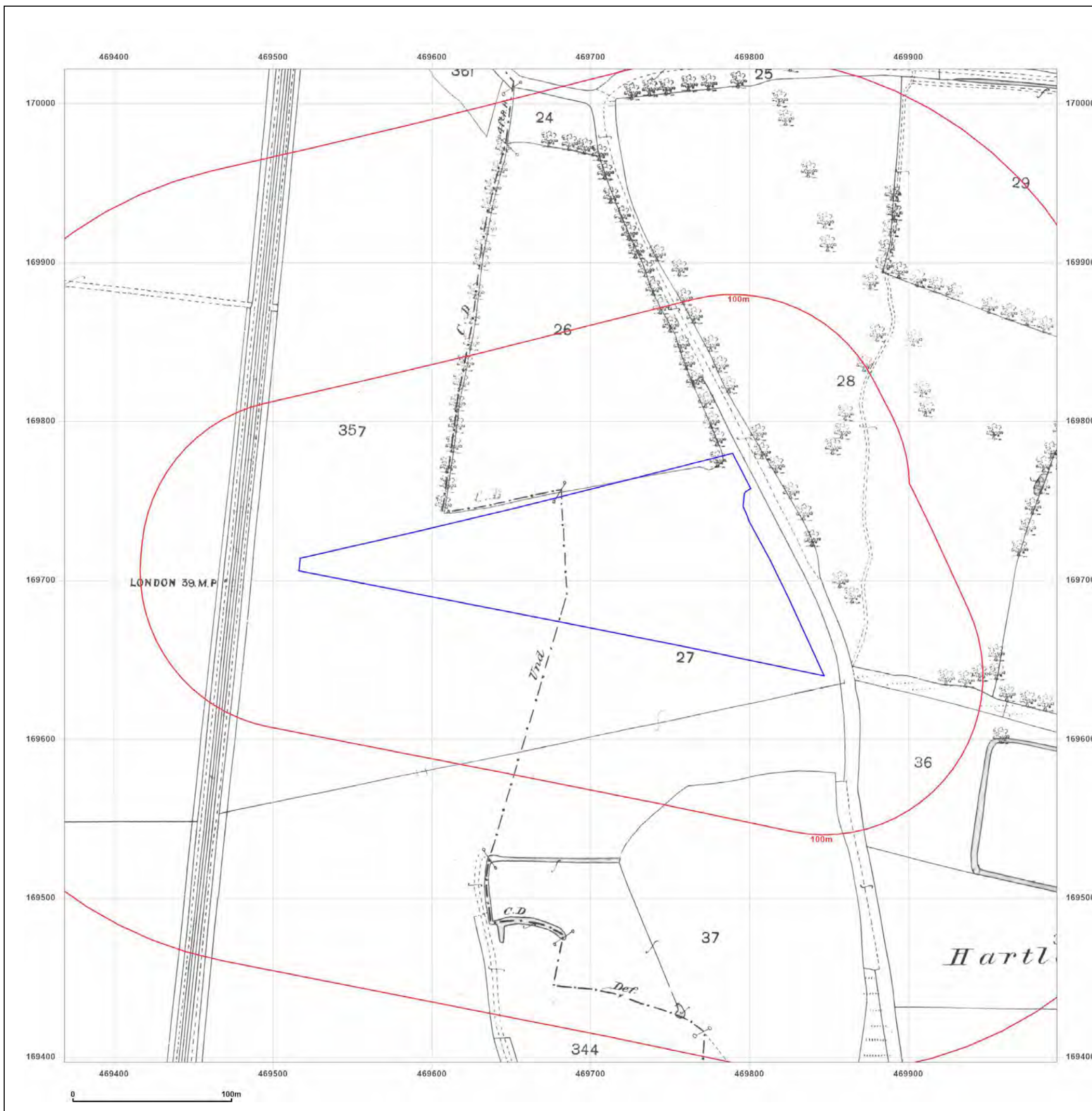


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Report Ref: GS-VPY-1NX-W6L-HES_2500
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Map Name: County Series

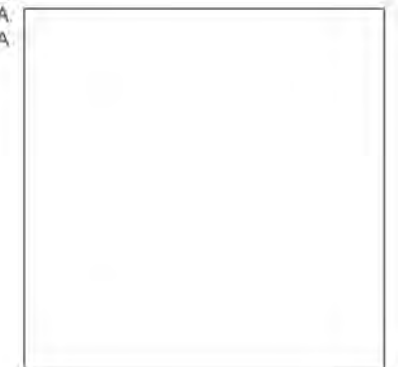
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Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

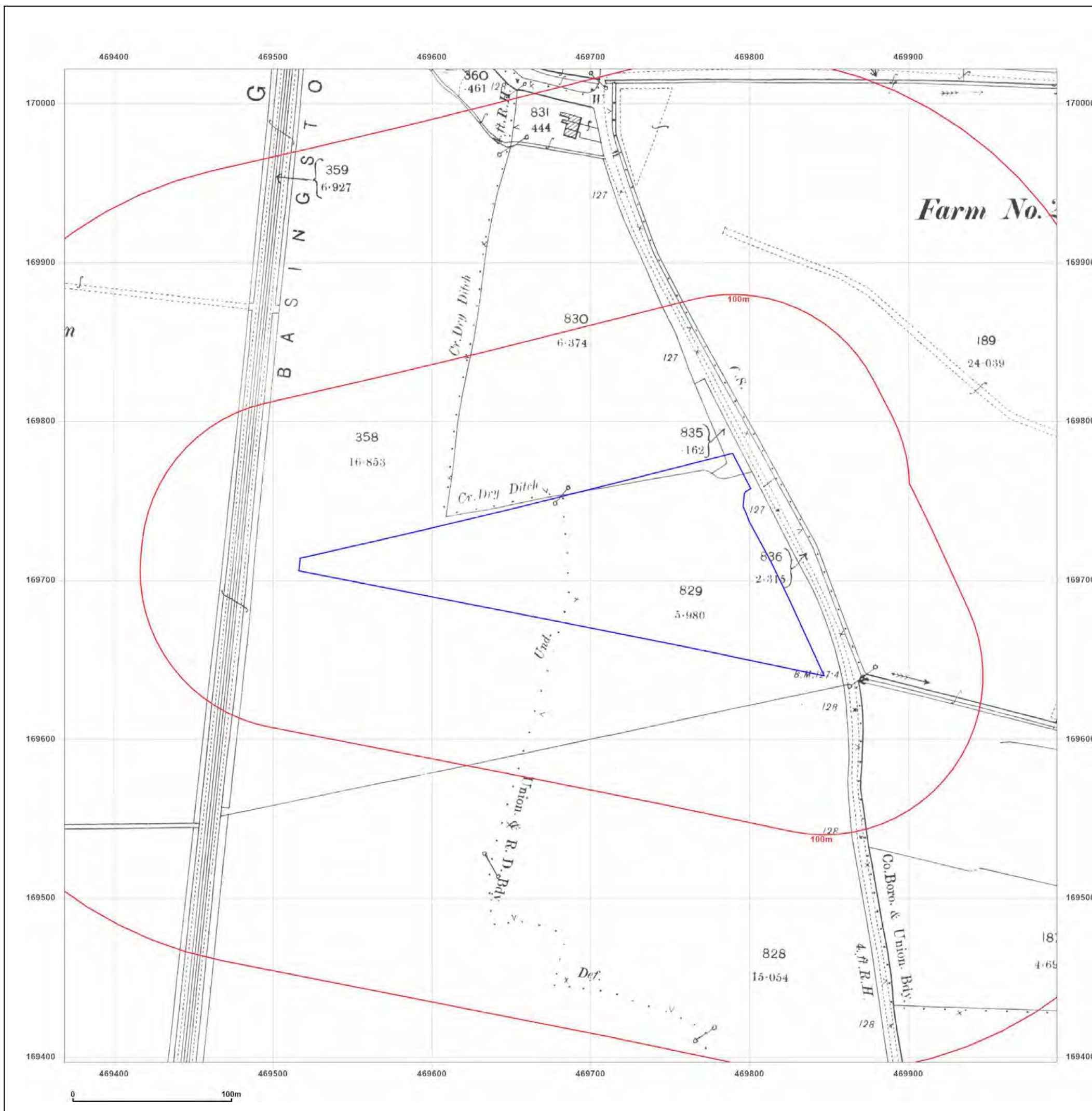


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Site Details:

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Report Ref: GS-VPY-1NX-W6L-HES_2500
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1968

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1967
 Revised 1967
 Edition N/A
 Copyright 1968
 Levelled 1951

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

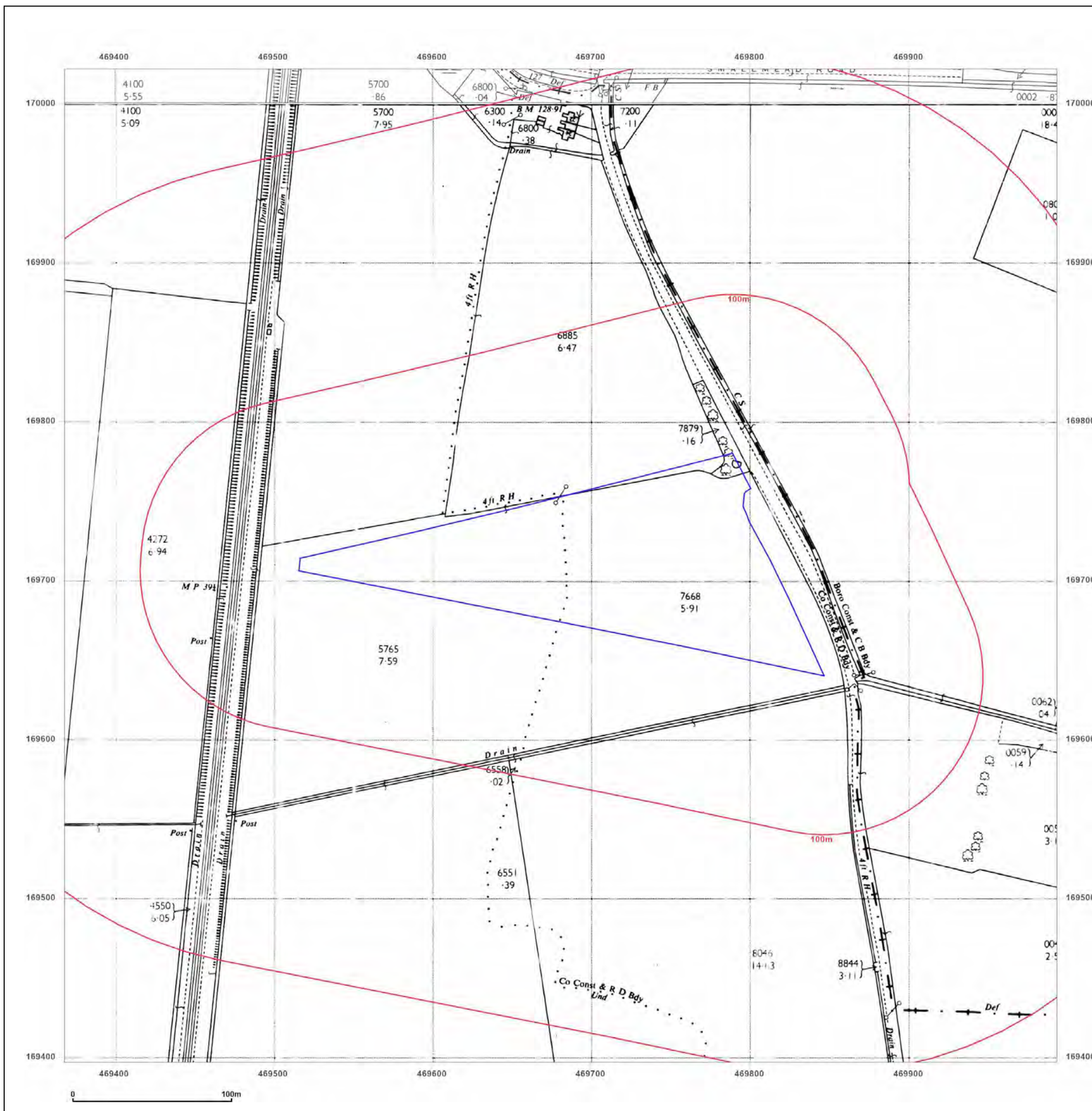


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Report Ref: GS-VPY-1NX-W6L-HES_2500
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1968

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed 1967
 Revised 1967
 Edition N/A
 Copyright 1968
 Levelled 1951

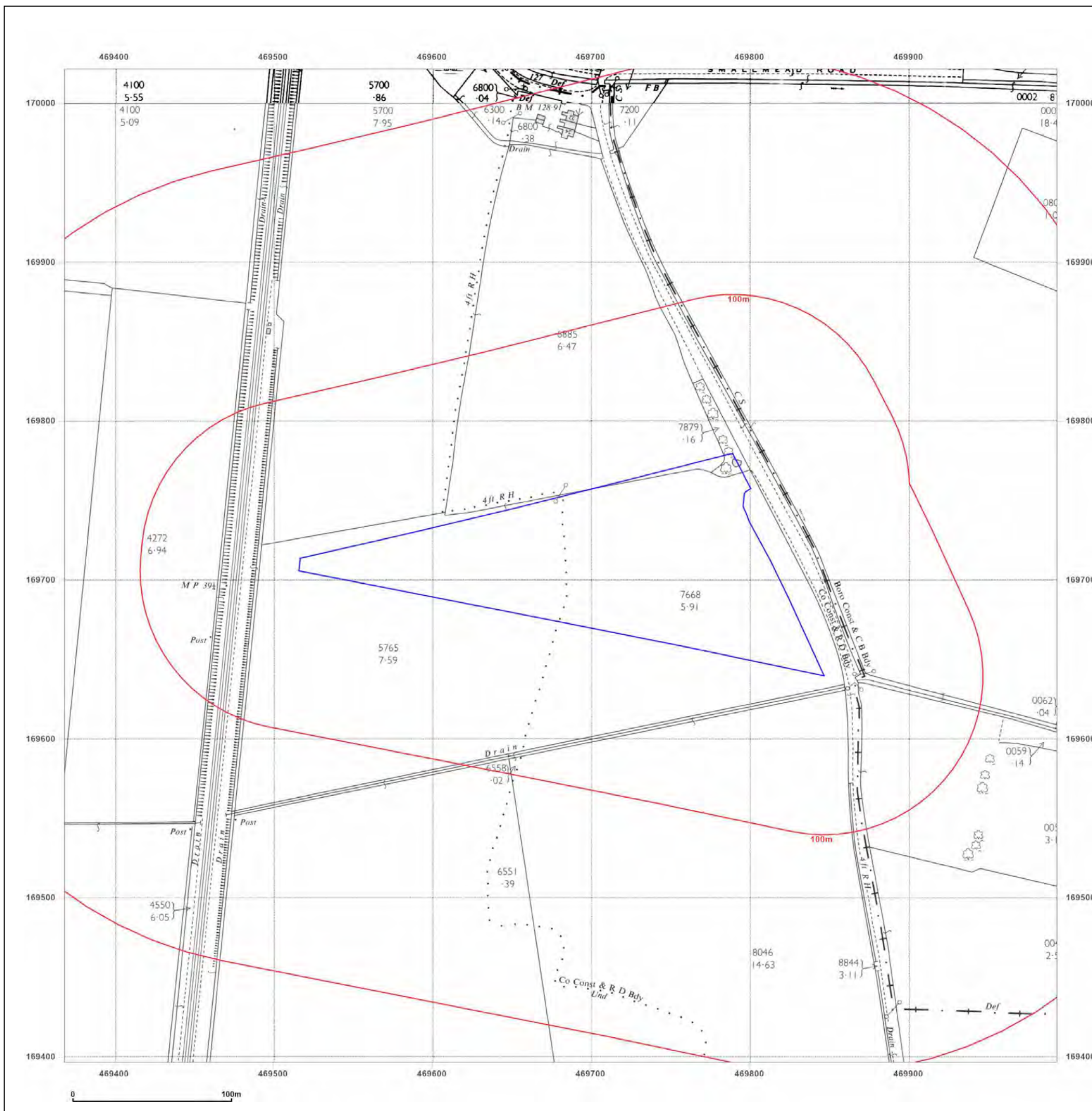


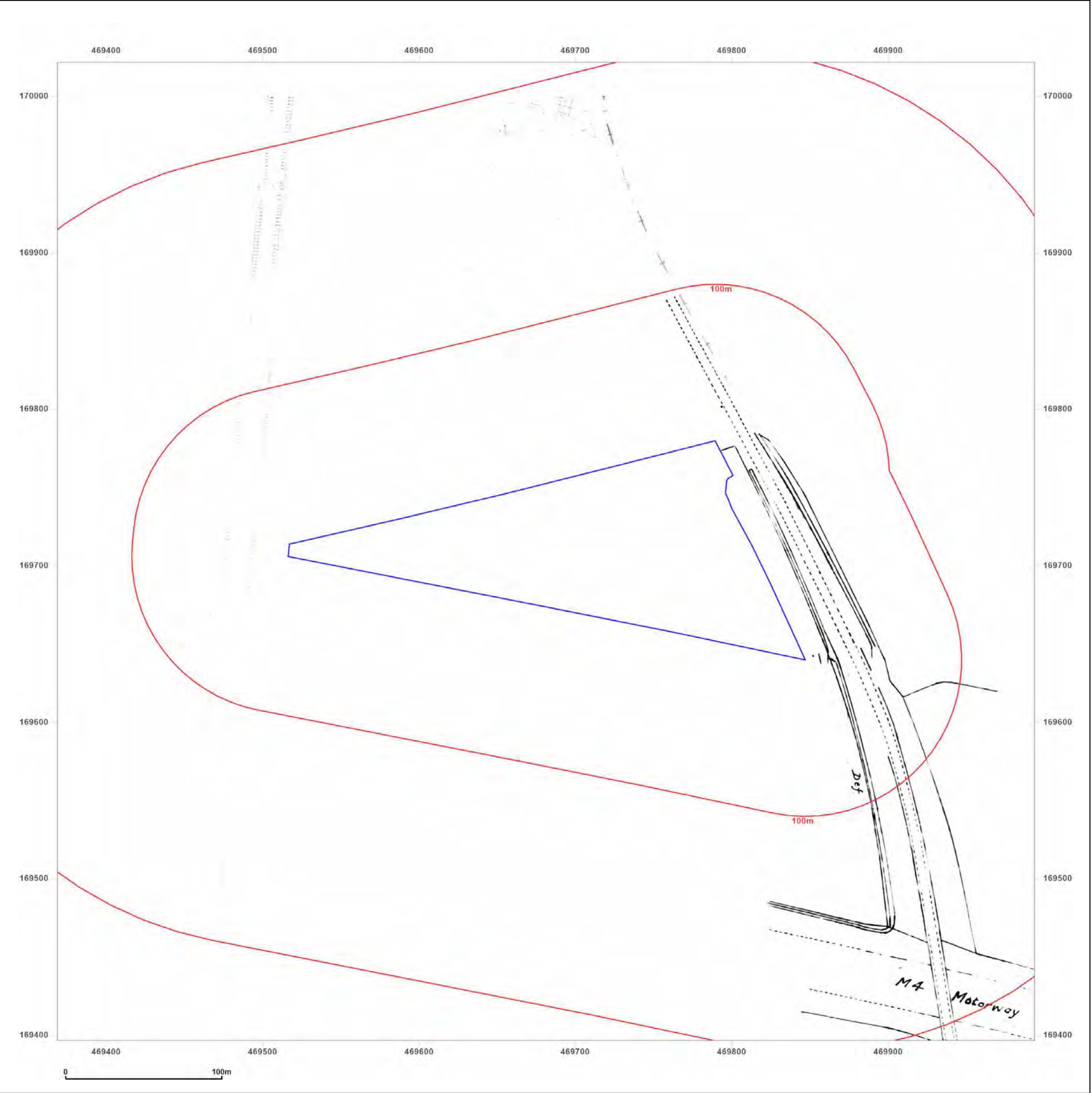
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Site Details:

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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES_2500
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1972

Scale: 1:2,500

Printed at: 1:2,500



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



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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES_2500
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1973

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1967
 Revised 1973
 Edition N/A
 Copyright 1973
 Levelled 1972

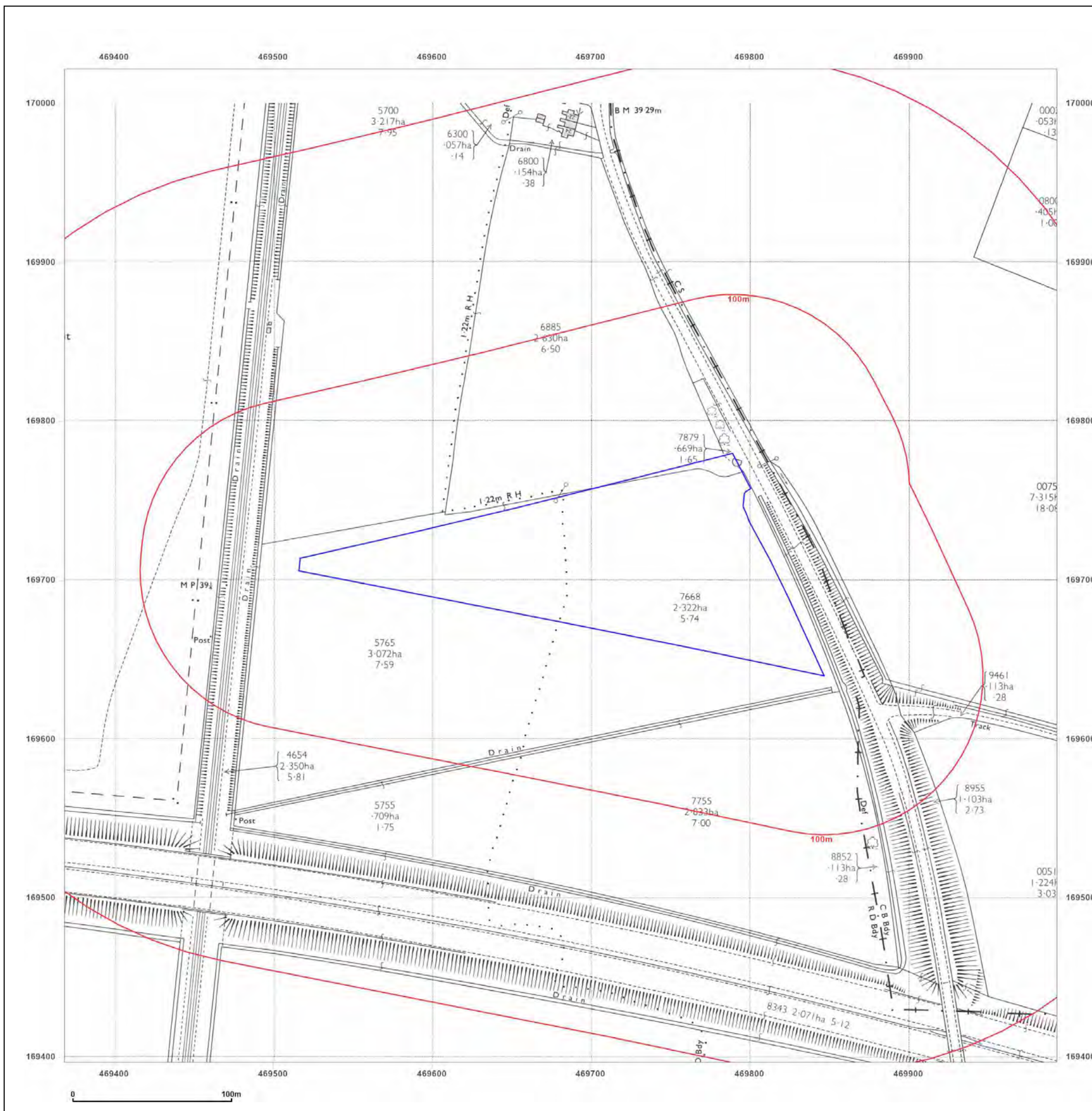


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Grid Ref: 469681, 169709

Map Name: National Grid

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Scale: 1:2,500

Printed at: 1:2,500



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

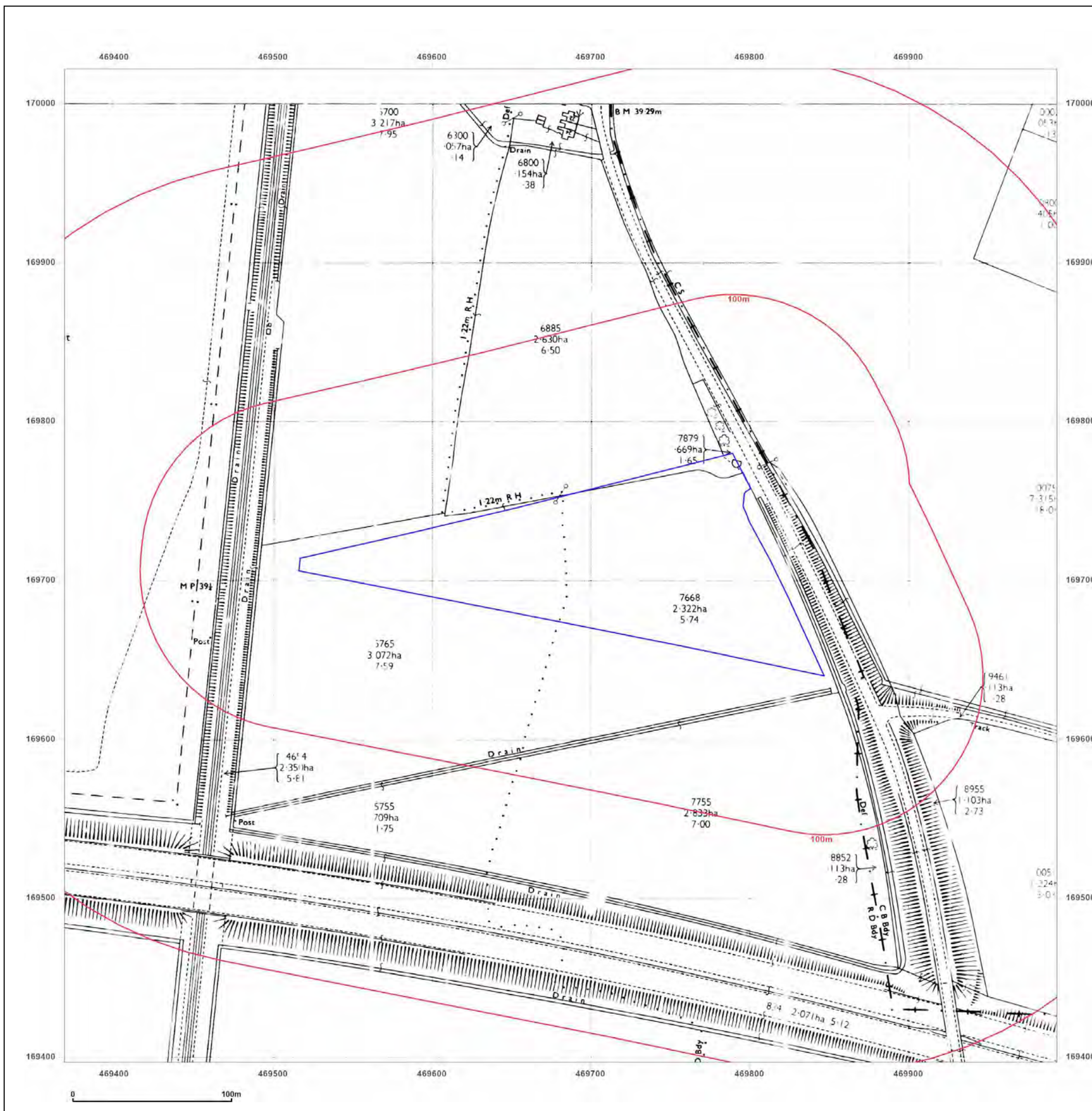


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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES_2500
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1989

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1972
 Revised 1989
 Edition N/A
 Copyright 1989
 Levelled 1972

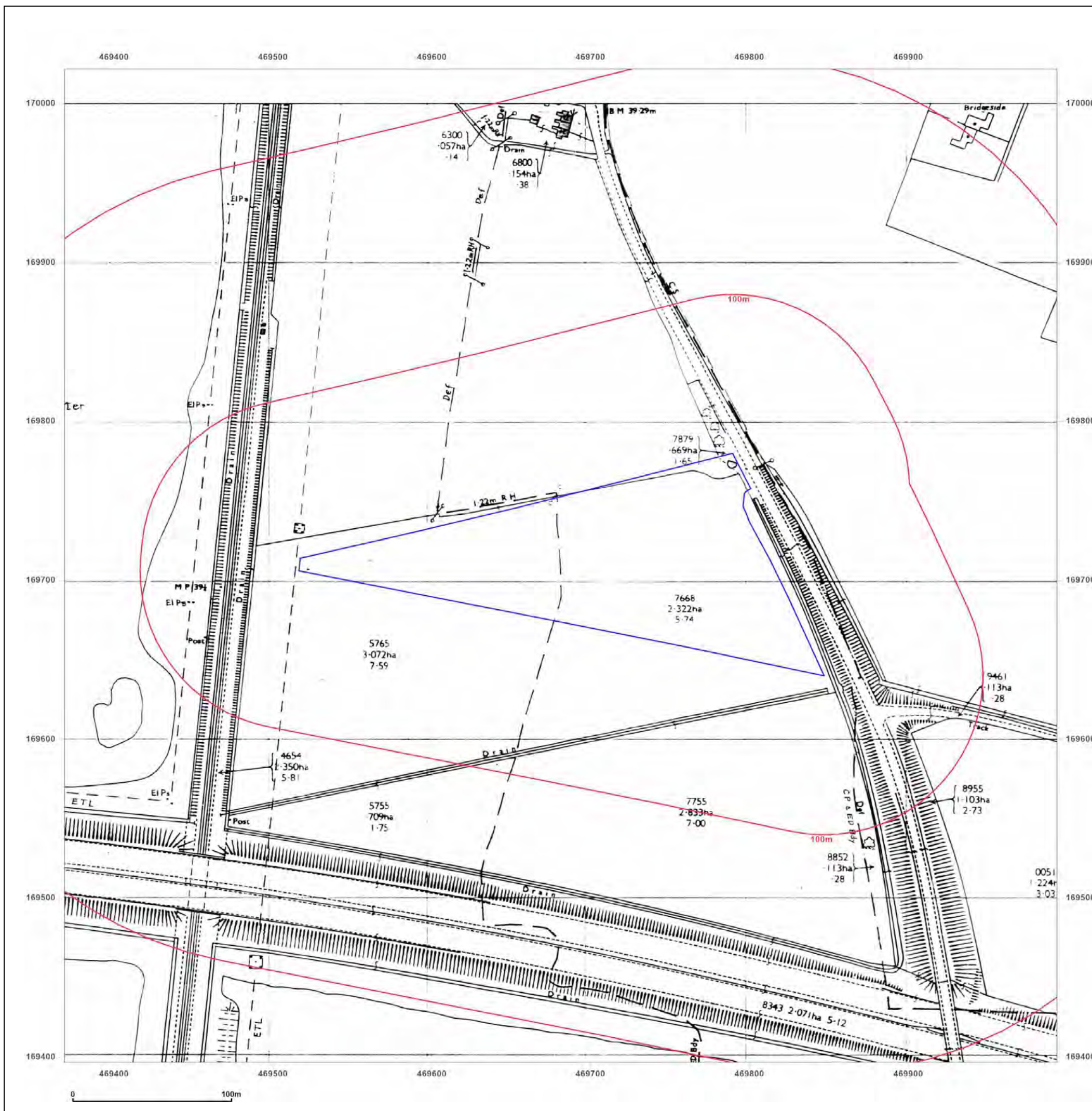


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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES_2500
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1989-1993

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1989
Levelled N/A

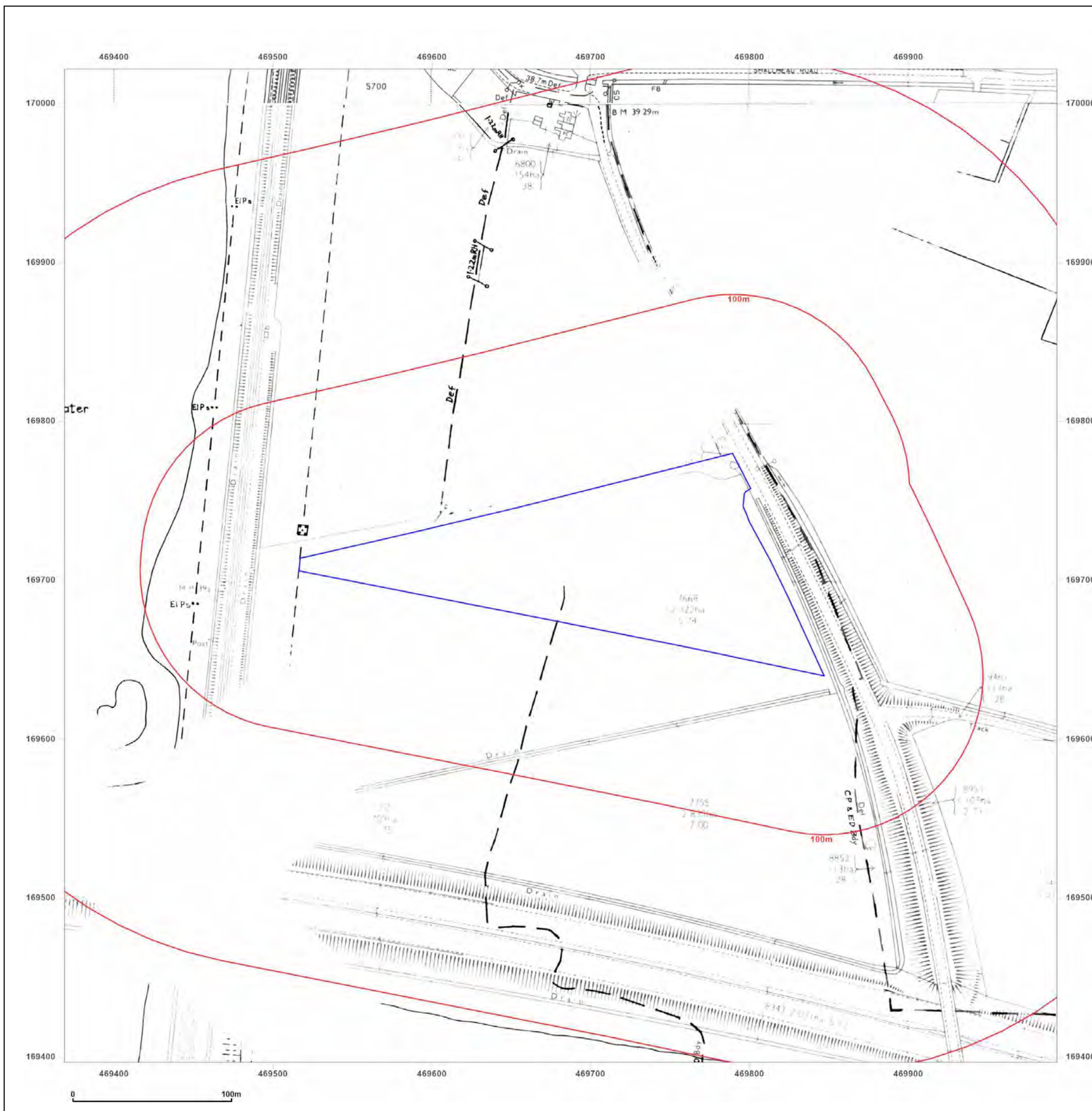


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Site Details:

Green Park, Reading

Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES_Landline_1_1
Grid Ref: 469531, 169709

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

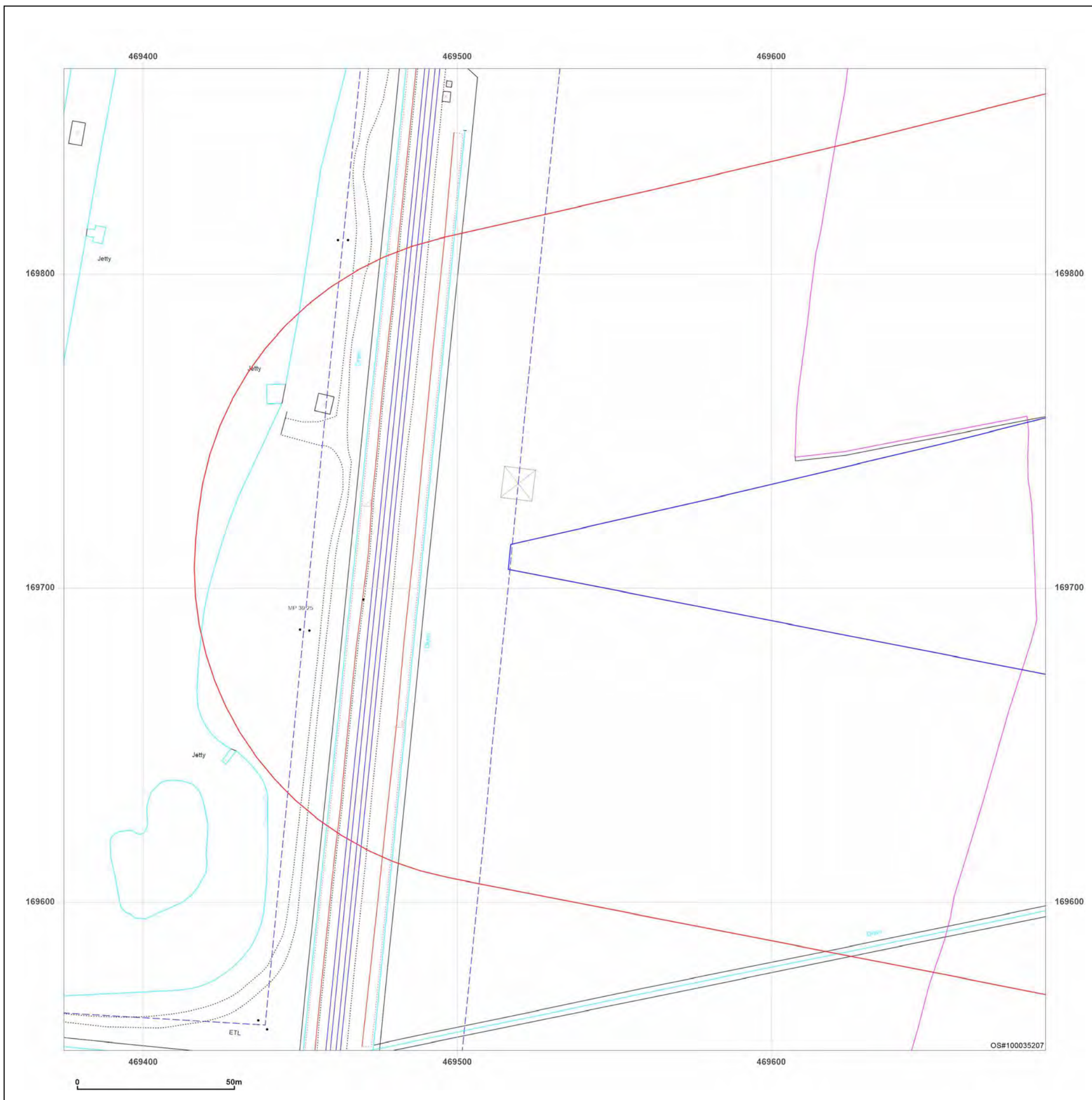


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Site Details:

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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES_Landline_2_1
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Printed at: 1:1,250

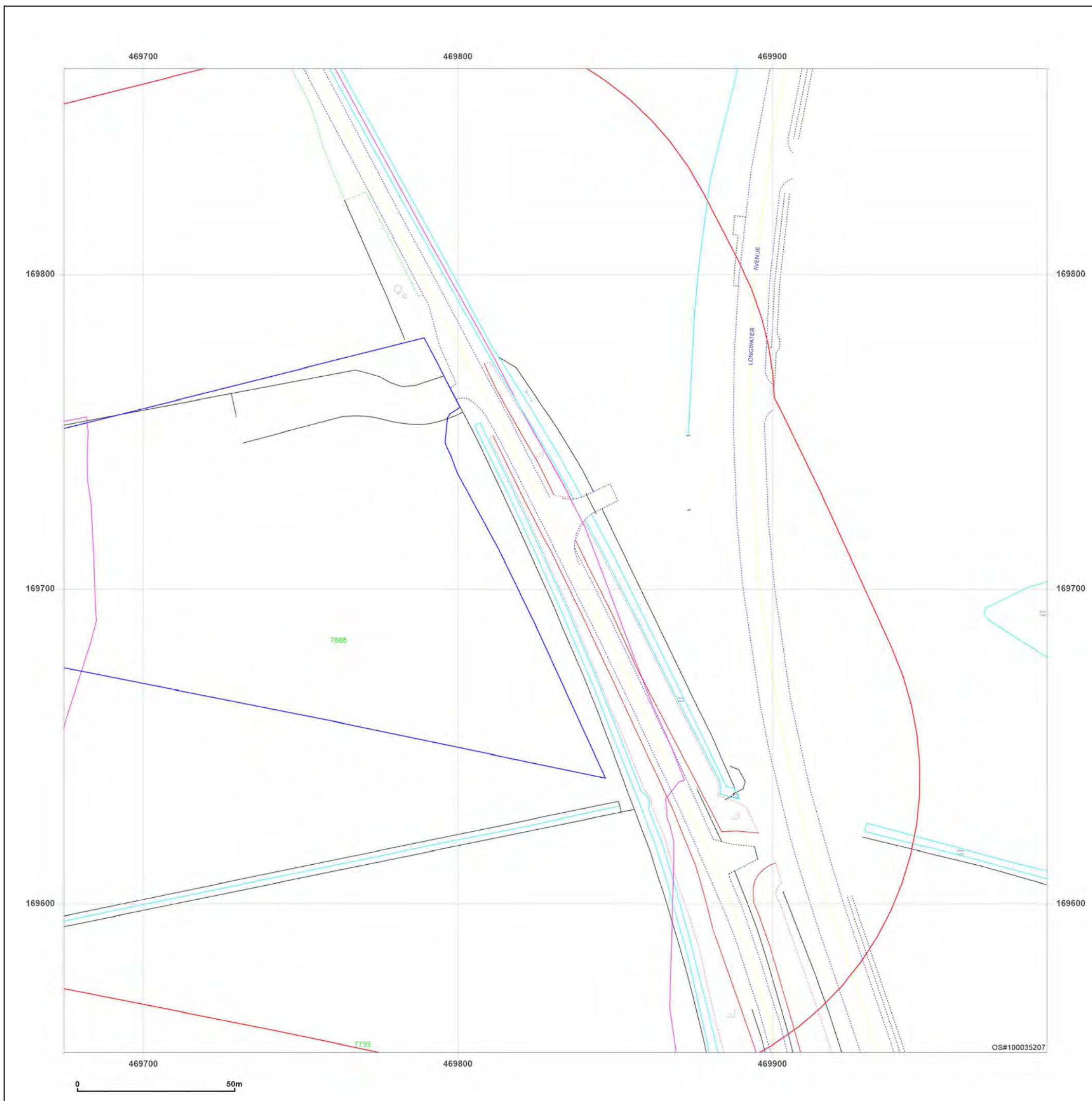


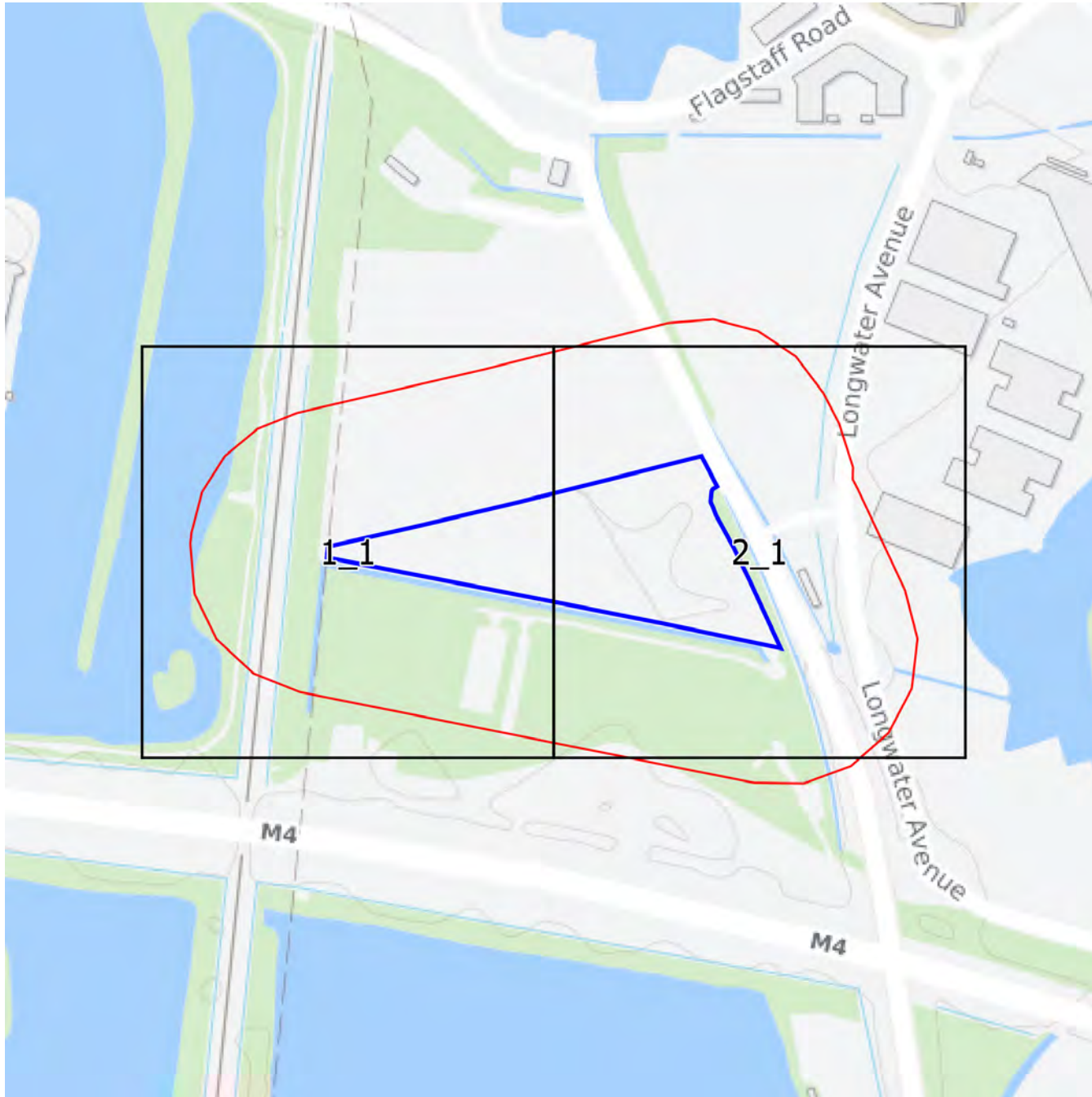
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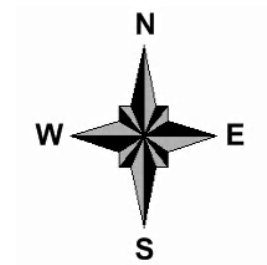
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Landline Scale Grid Index



Site Details:

Green Park, Reading

Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: County Series

Map date: 1898

Scale: 1:10,560

Printed at: 1:10,560



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

Surveyed 1876
 Revised 1898
 Edition N/A
 Copyright N/A
 Levelled N/A

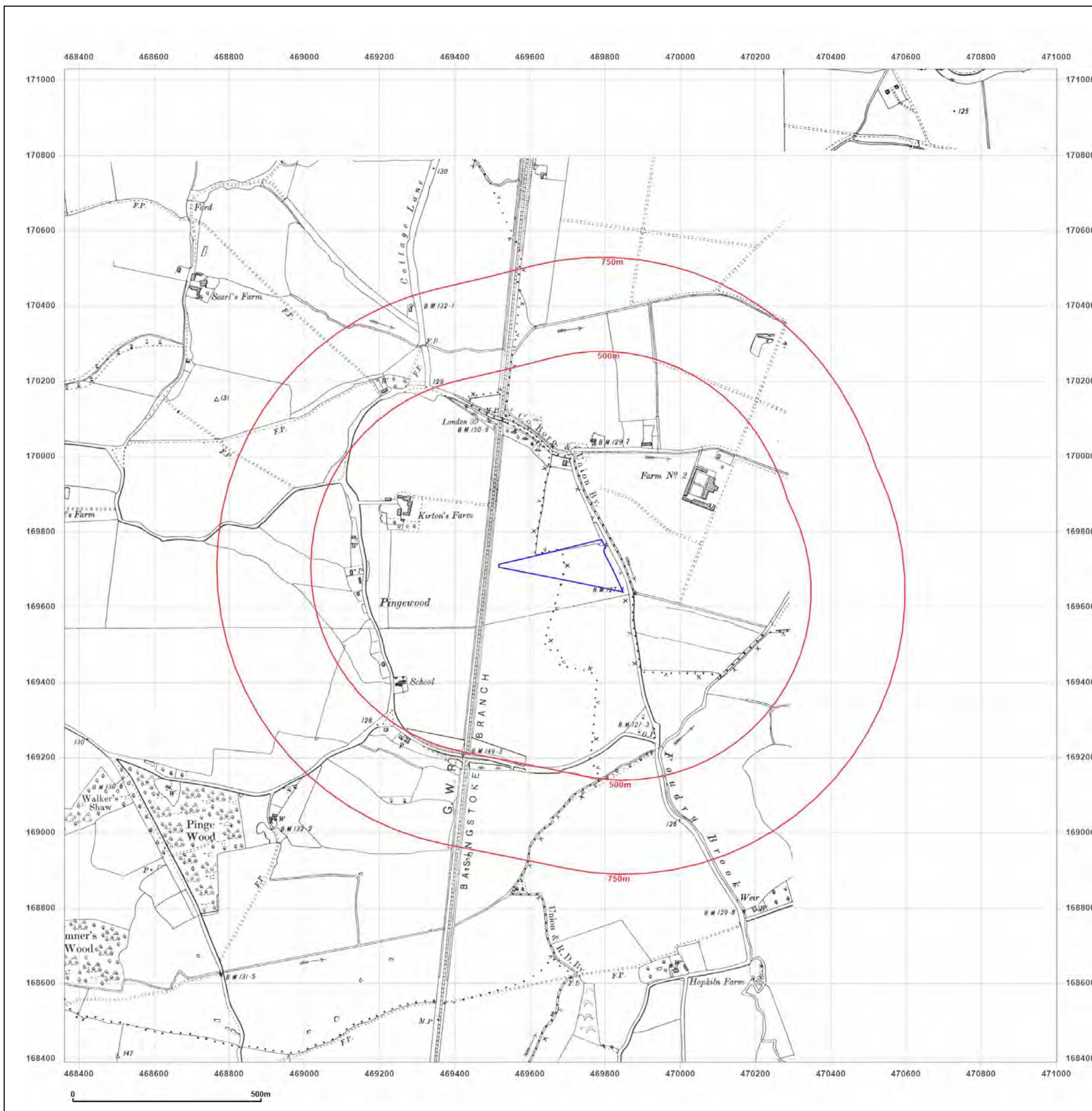


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Site Details:

Green Park, Reading

Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: County Series

Map date: 1898-1900

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1877
 Revised 1898
 Edition 1900
 Copyright N/A
 Levelled N/A

Surveyed 1877
 Revised 1898
 Edition N/A
 Copyright N/A
 Levelled N/A

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

Surveyed 1876
 Revised 1898
 Edition N/A
 Copyright N/A
 Levelled N/A

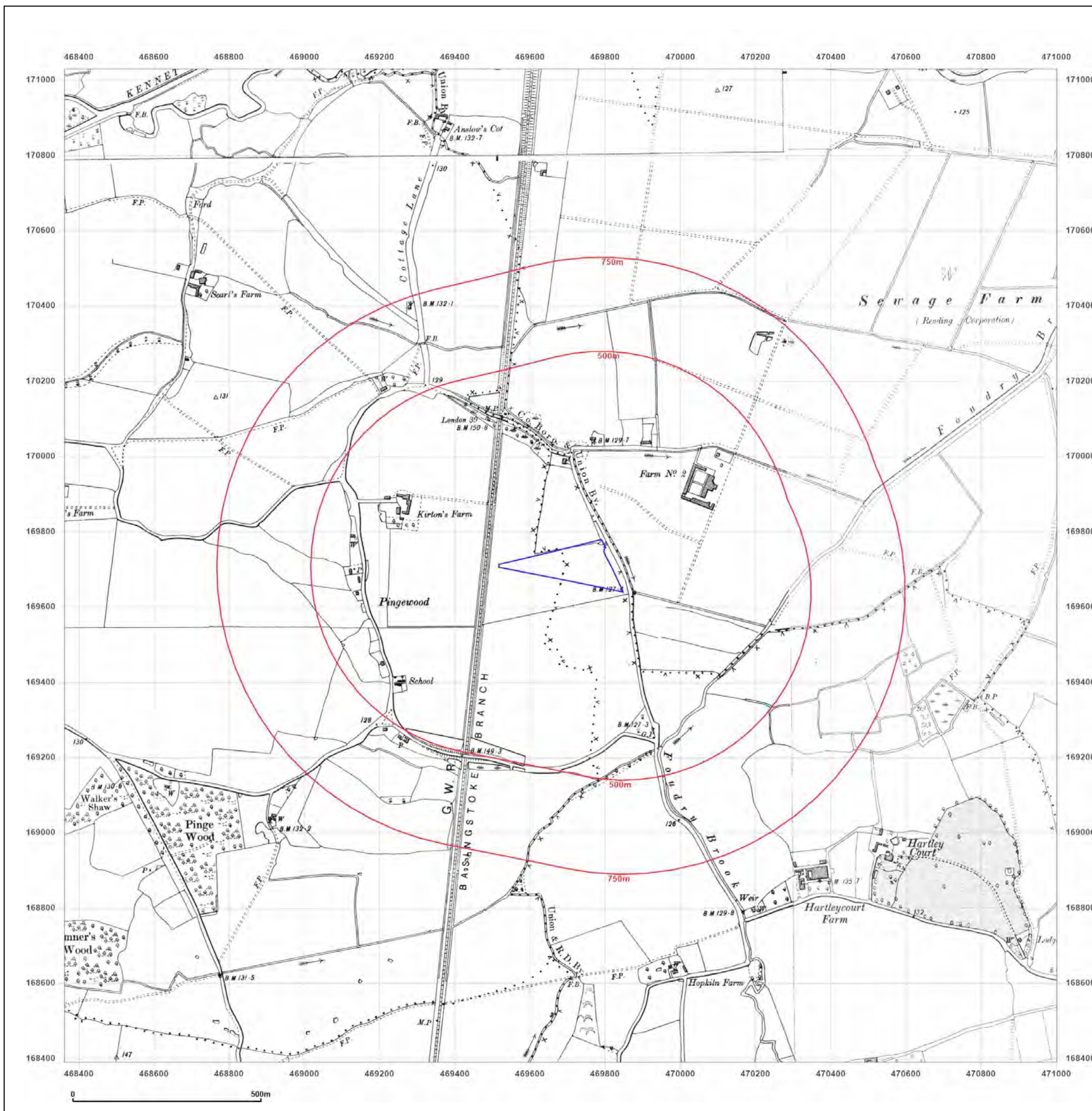


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Site Details:

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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: County Series

Map date: 1910-1913

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1877
 Revised 1910
 Edition N/A
 Copyright N/A
 Levelled N/A

Surveyed 1877
 Revised 1910
 Edition 1913
 Copyright N/A
 Levelled N/A

Surveyed 1876
 Revised 1913
 Edition 1913
 Copyright N/A
 Levelled N/A

Surveyed 1876
 Revised 1913
 Edition 1913
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 Levelled N/A

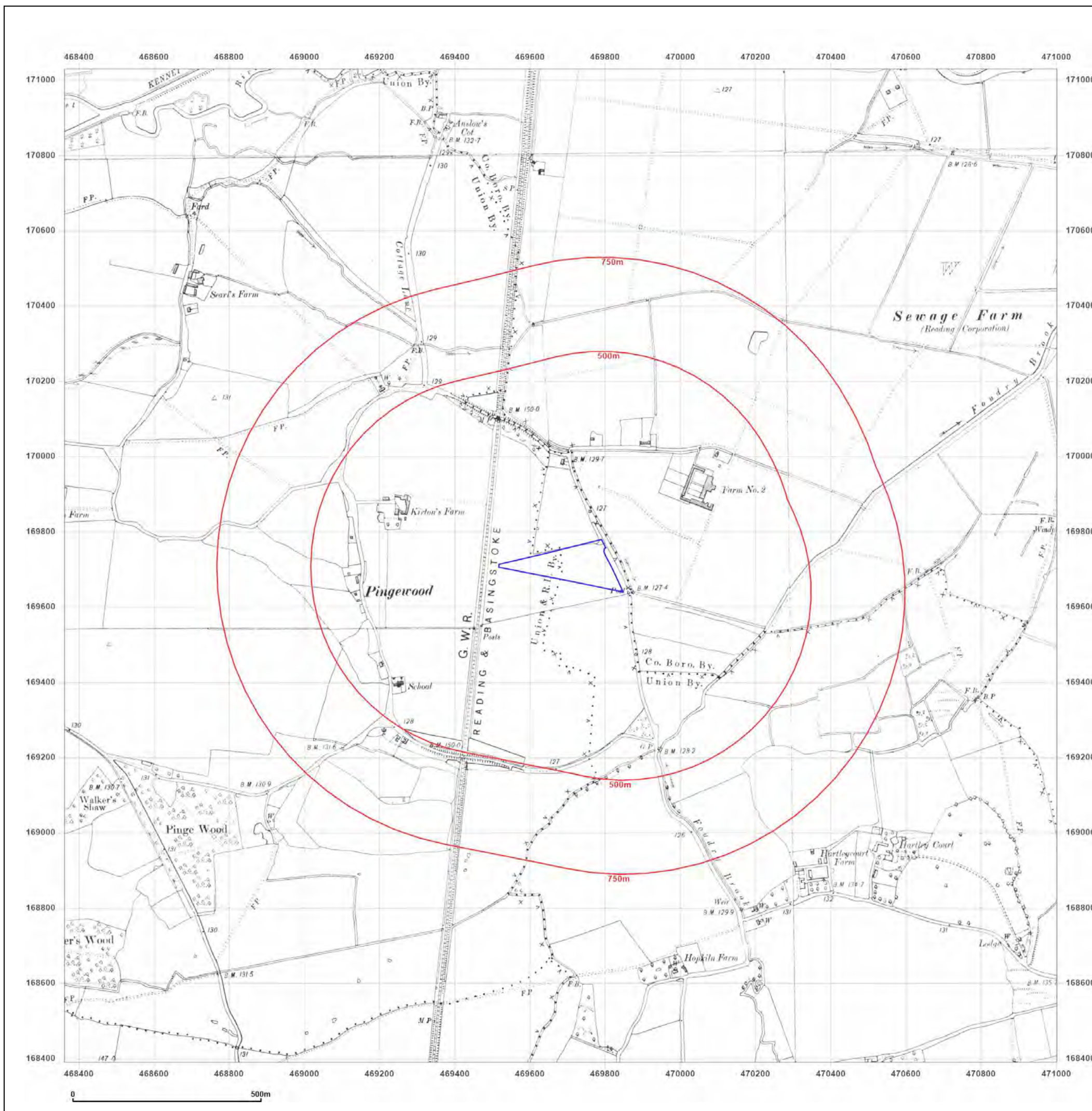


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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1877
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1877
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1938
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Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1938
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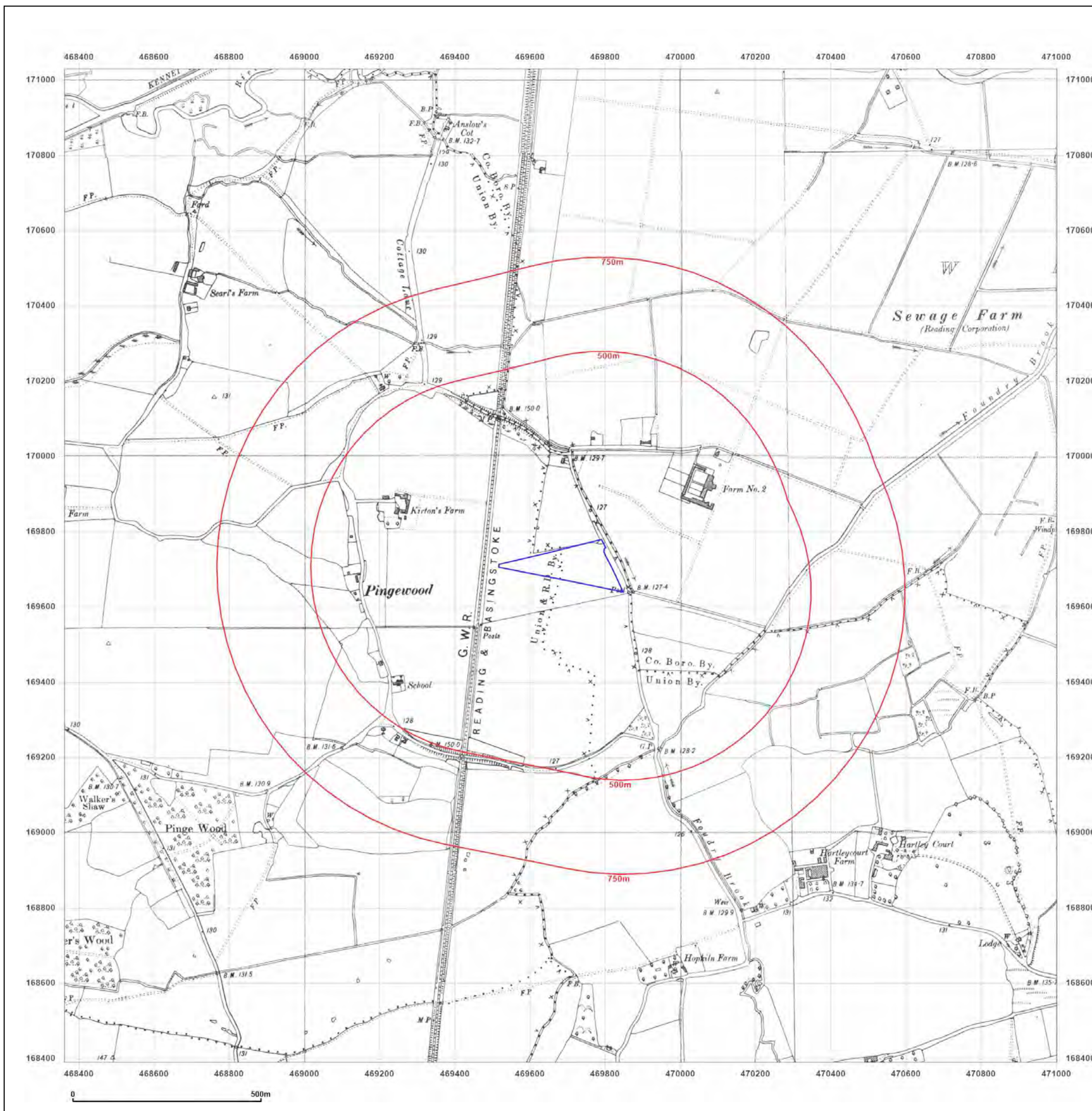


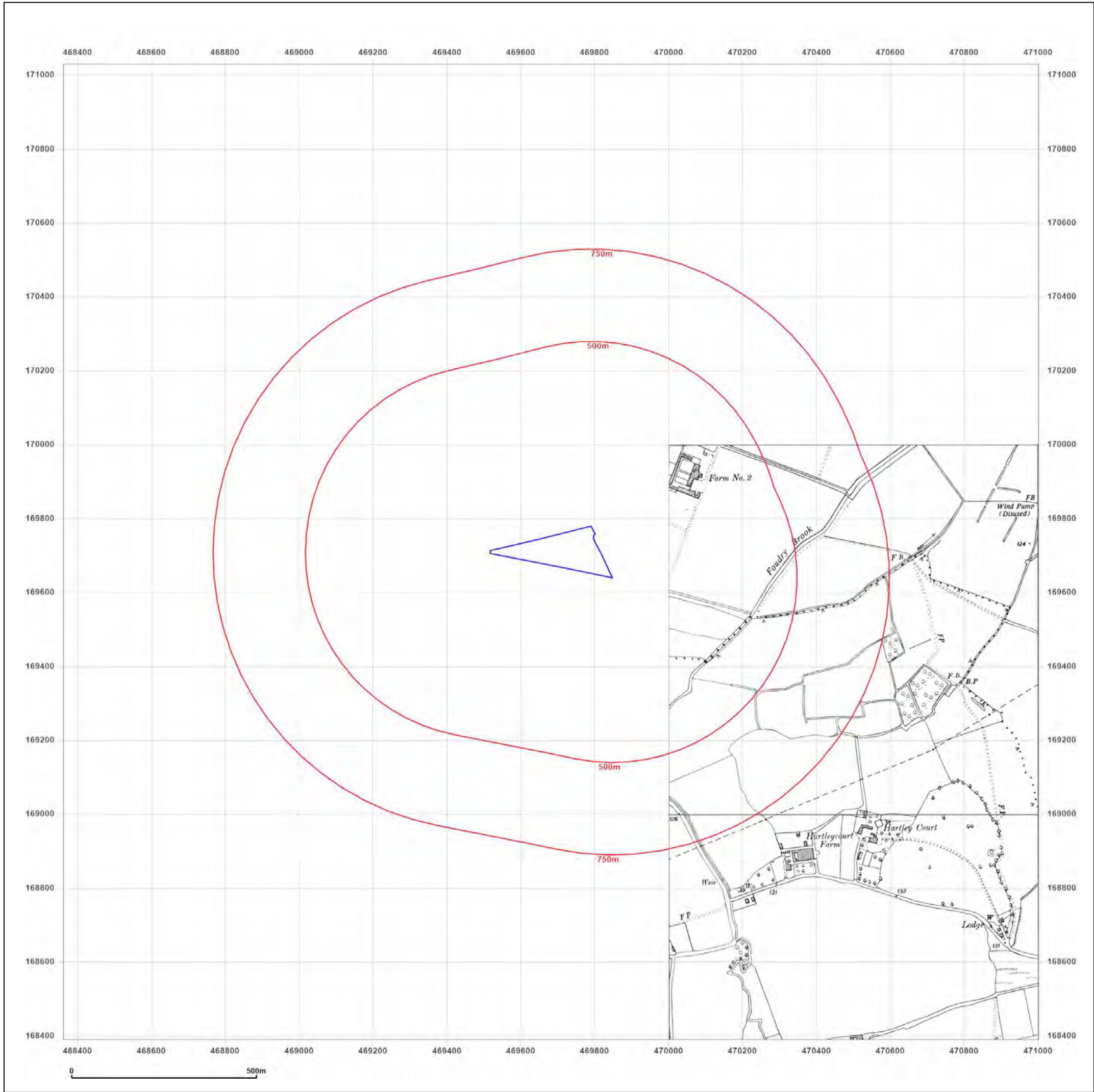
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Site Details:

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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: Provisional
Map date: 1961
Scale: 1:10,560
Printed at: 1:10,560

Surveyed N/A
Revised 1961
Edition N/A
Copyright 1961
Levelled N/A

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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: Provisional

Map date: 1961-1962

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
 Revised 1960
 Edition 1961
 Copyright 1961
 Levelled N/A

Surveyed 1959
 Revised 1961
 Edition N/A
 Copyright 1962
 Levelled N/A

Surveyed N/A
 Revised 1960
 Edition N/A
 Copyright 1961
 Levelled N/A

Surveyed N/A
 Revised 1961
 Edition N/A
 Copyright 1961
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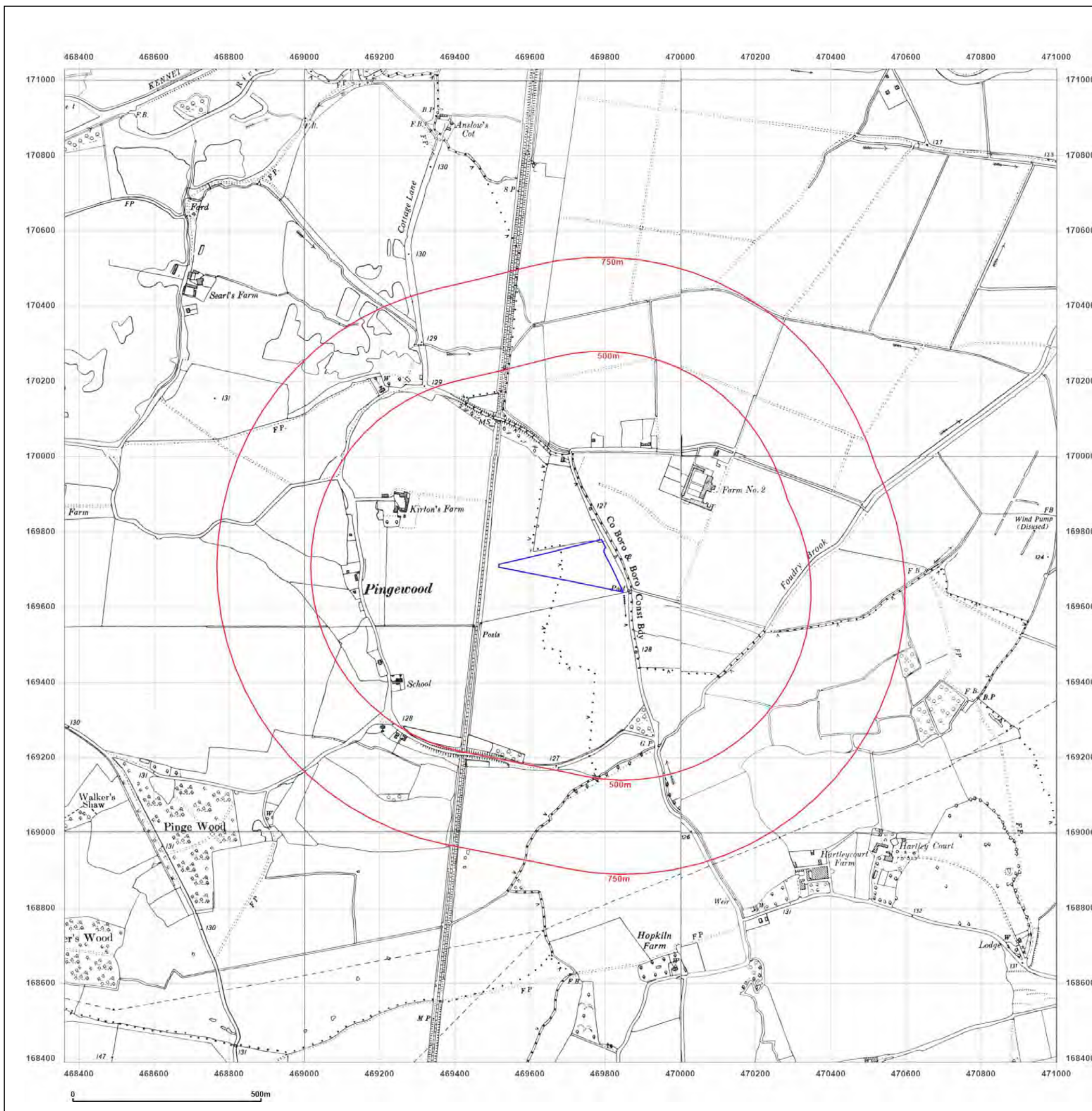


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Site Details:

Green Park, Reading

Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: Provisional

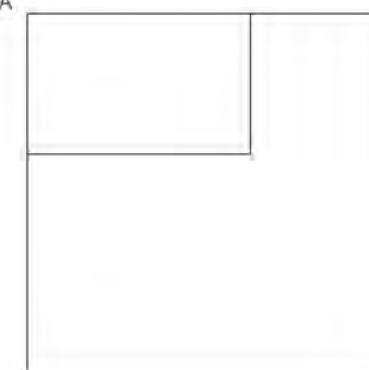
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 Revised 1968
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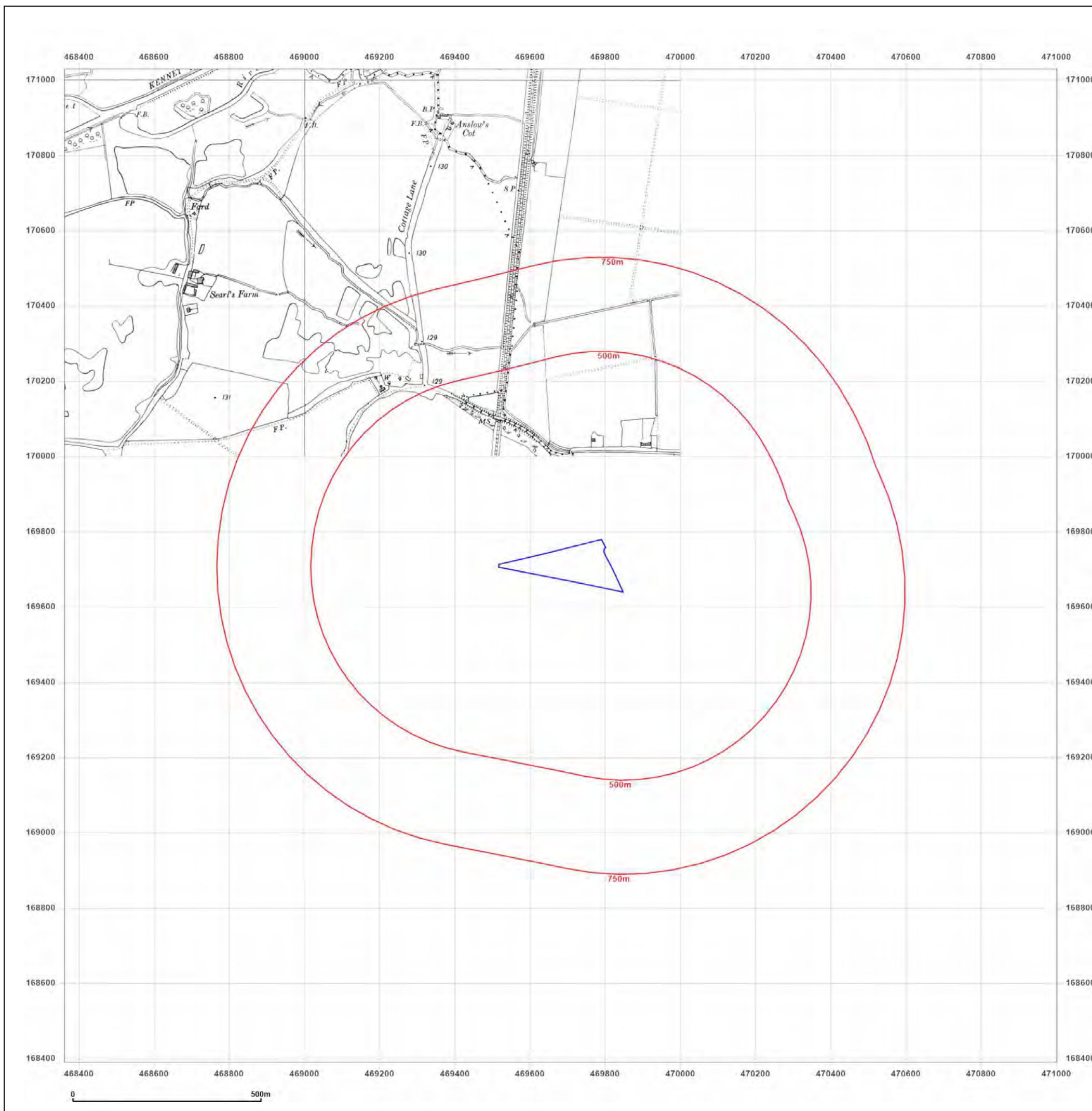


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Site Details:

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Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1969-1973

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1970
 Revised 1973
 Edition N/A
 Copyright 1973
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Surveyed 1969
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 Edition N/A
 Copyright 1972
 Levelled 1969

Surveyed 1969
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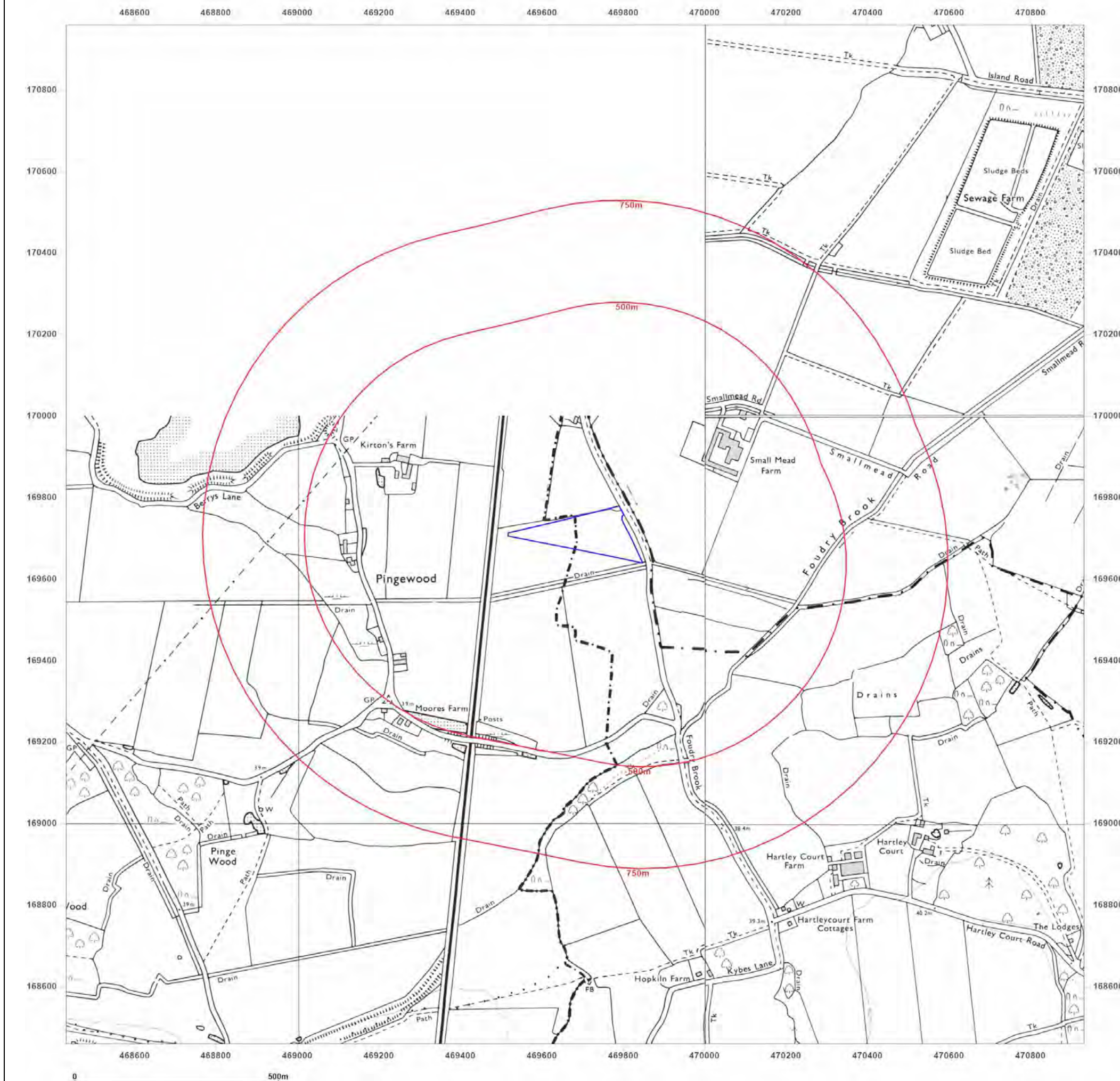


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Site Details:

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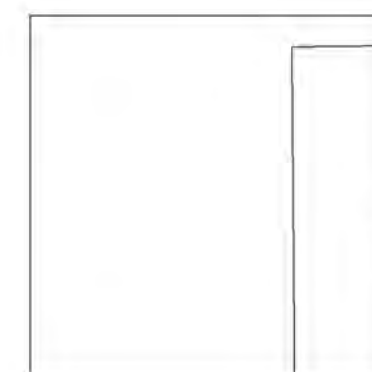
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Grid Ref: 469681, 169709

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Map date: 1976

Scale: 1:10,560

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Surveyed 1976
Revised 1898
Edition 1900
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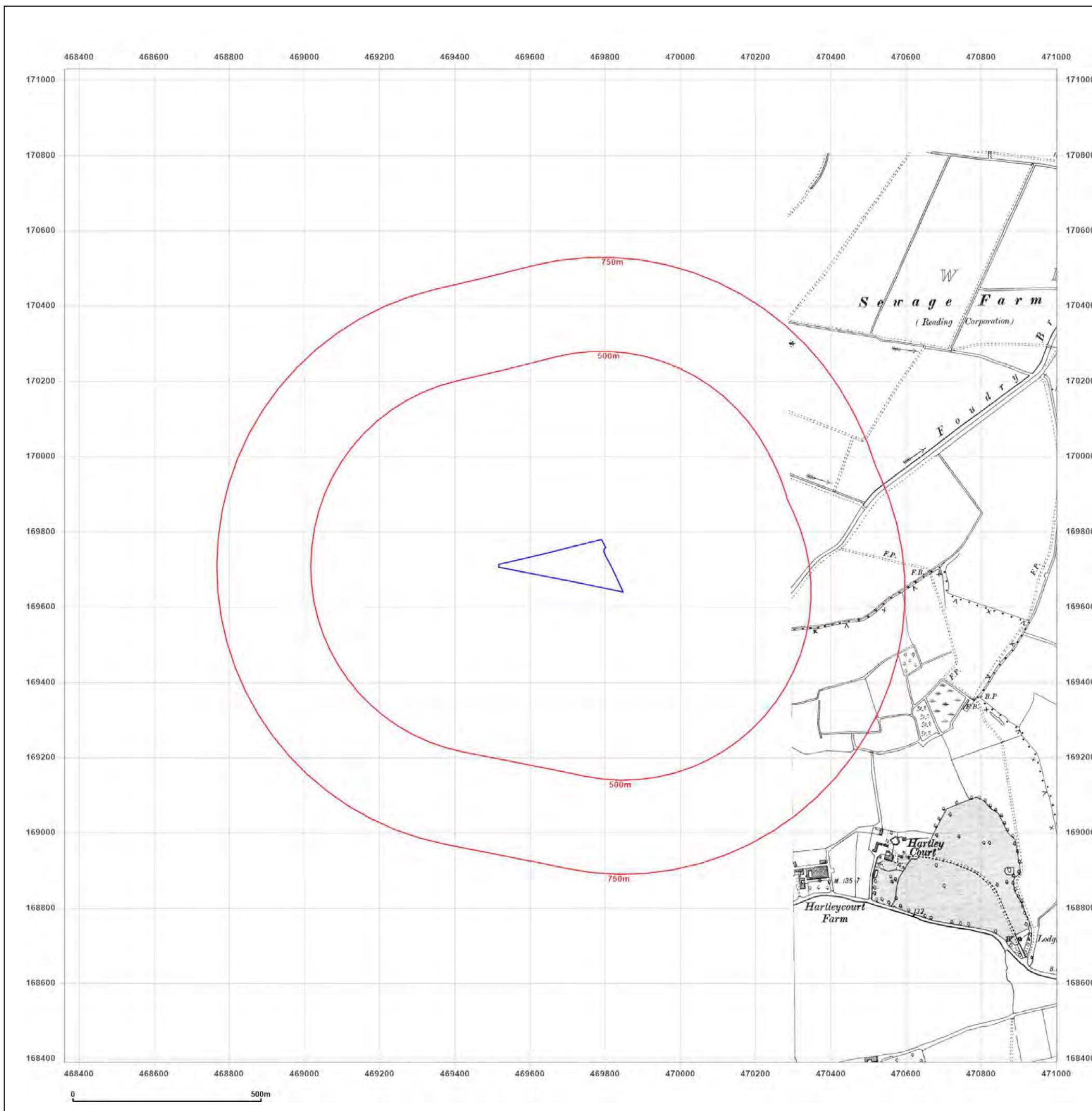


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Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1976-1979

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1973
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 Edition N/A
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Surveyed 1977
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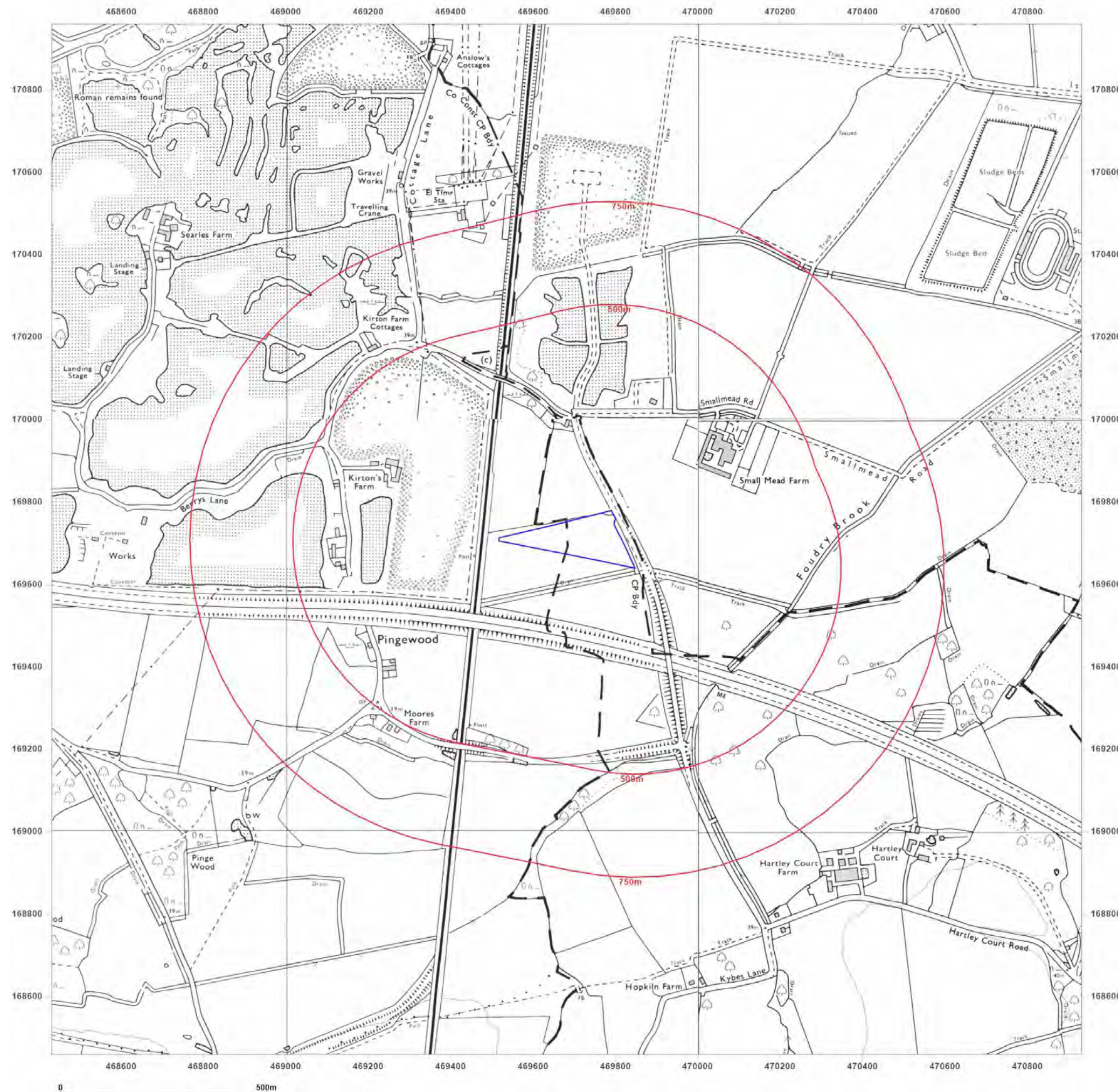


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Site Details:

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Grid Ref: 469681, 169709

Map Name: National Grid

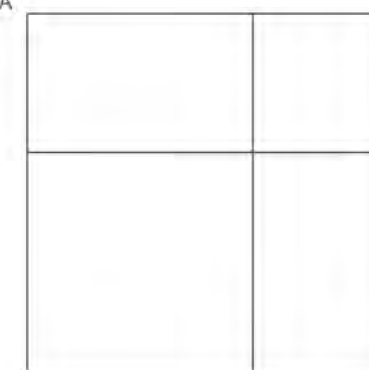
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Surveyed 1981
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 Edition N/A
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 Revised 1983
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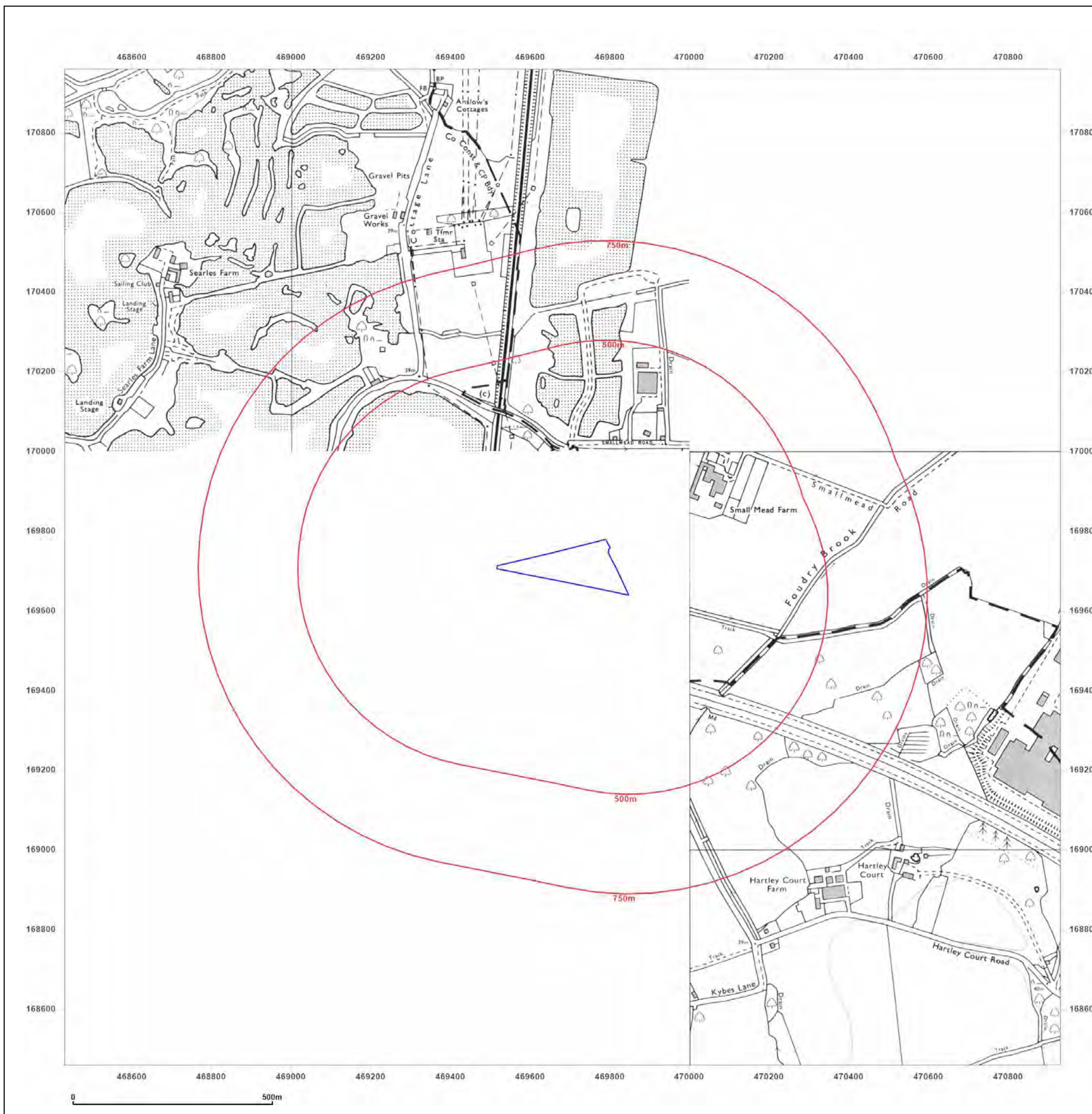


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Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 1988-1991

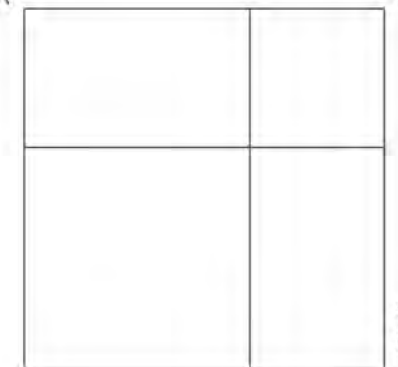
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 Edition N/A
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Surveyed 1987
 Revised 1989
 Edition N/A
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 Revised 1988
 Edition N/A
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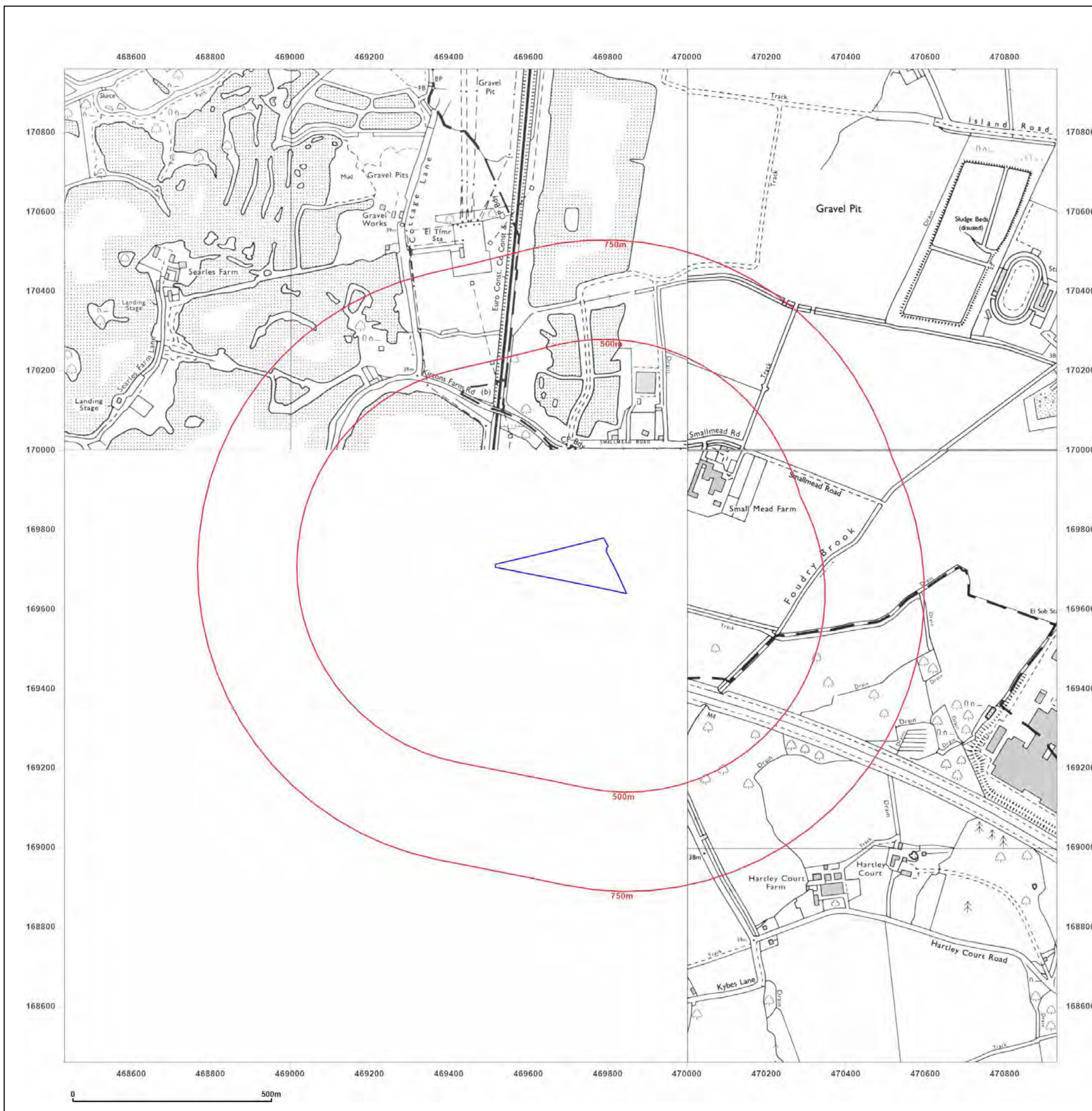


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Map Name: National Grid

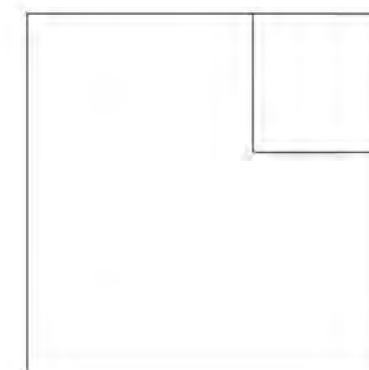
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Surveyed 1987
Revised 1994
Edition N/A
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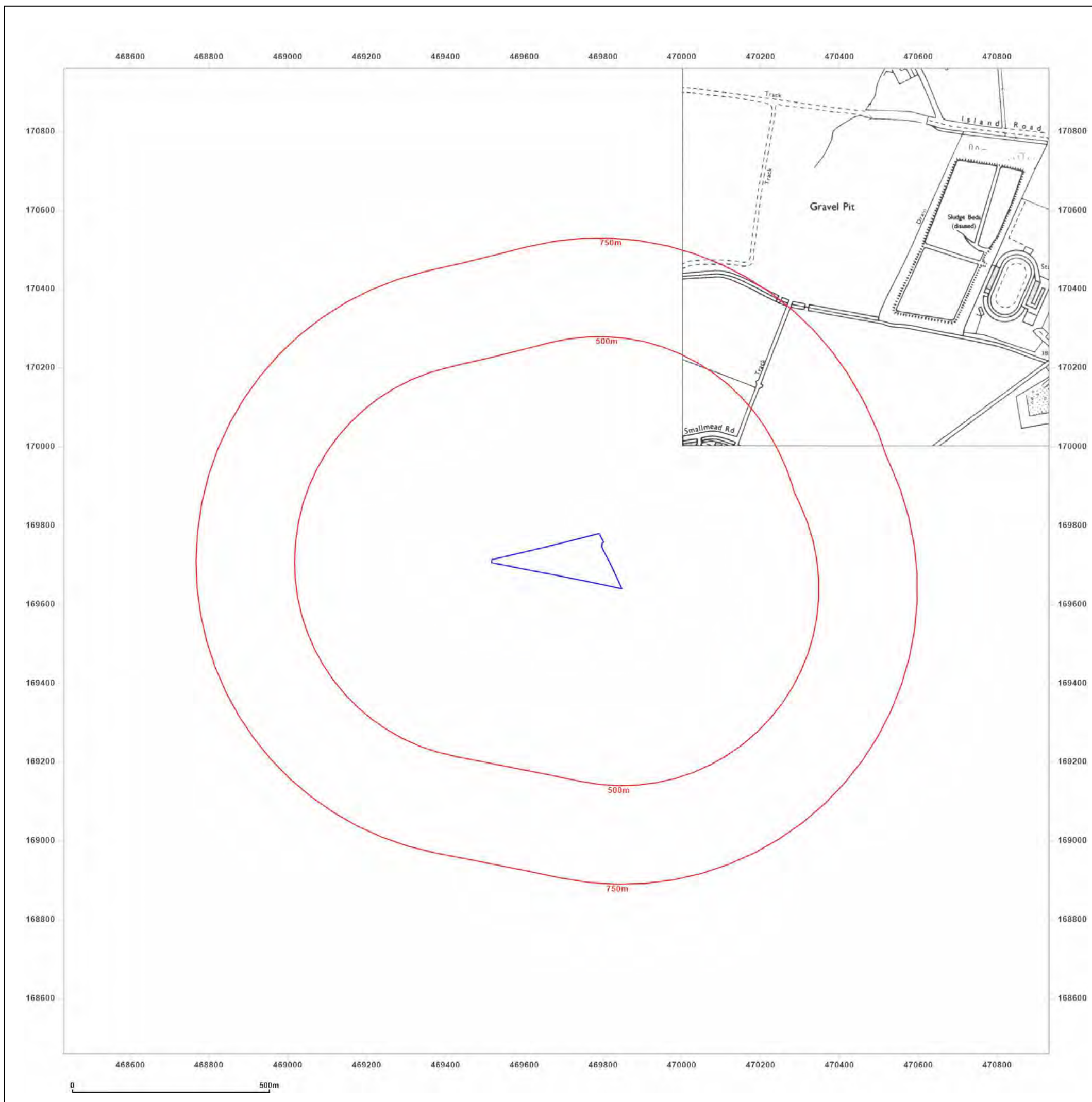


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Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000

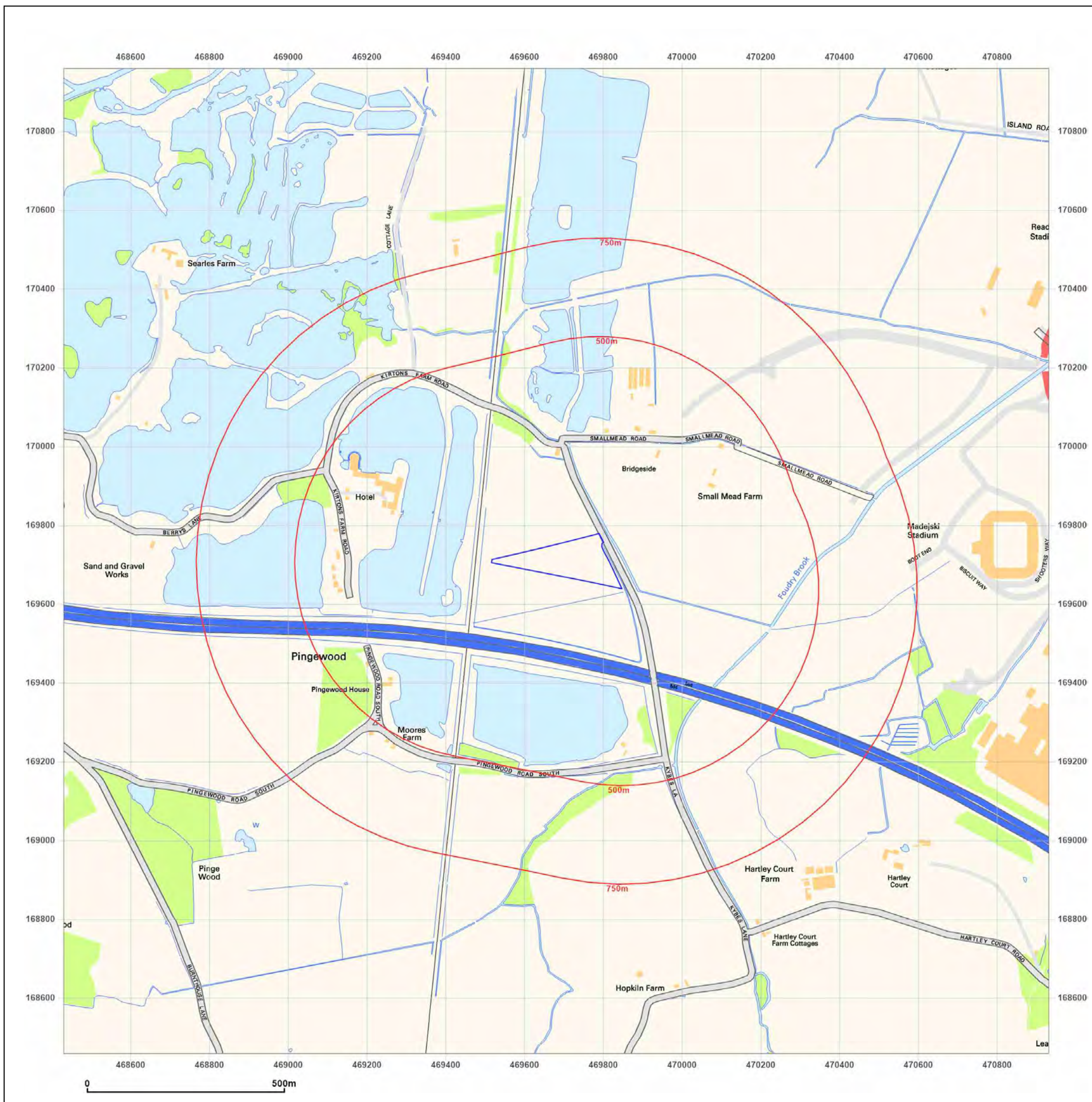


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Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



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Site Details:

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Client Ref: UK2102325
Report Ref: GS-VPY-1NX-W6L-HES
Grid Ref: 469681, 169709

Map Name: National Grid

Map date: 2024

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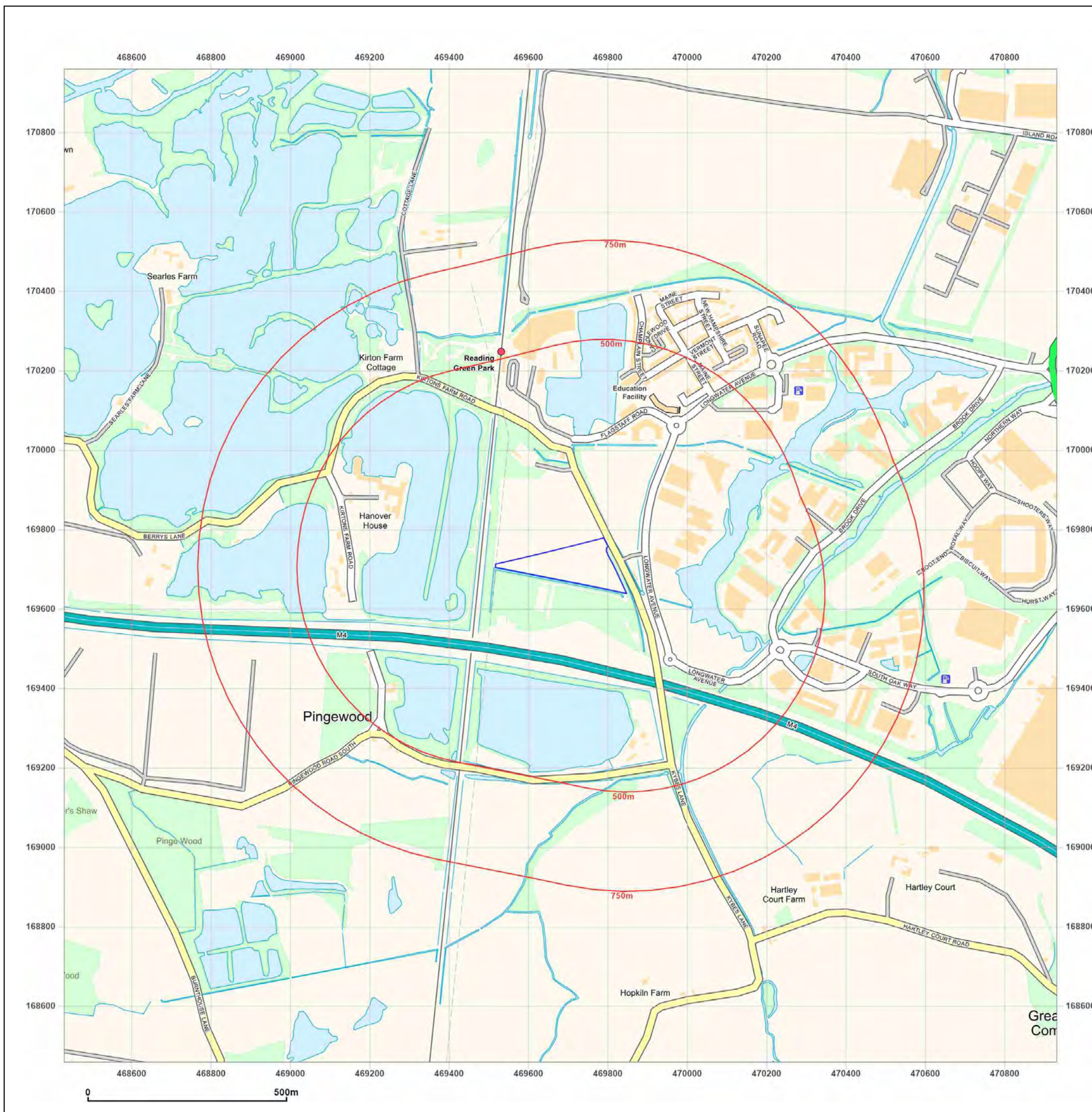


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Appendix C

BGS Borehole Logs

 Soil Mechanics				BOREHOLE No. 181A Sheet 1 of 5			
Equipment & Methods Cable tool (Low Headroom rig) boring in 150mm diameter to 12.00m. Then (1.75T Dando rig) boring in 150mm diameter to 26.00m. Cased to 23.80m.				Location No. 7753 Location SUBBNE 102 M4 WIDENING JUNCTIONS 8(9) TO 12 R.W.S			
Carried out for DTP (HMA)				Ground Level 40.11 m A.O.D.		Coordinates 469482.5m E 169533.7m N	
				Date 08.04.92 to 13.04.92			
Description	Reduced Level	Legend	Depth (Thick)	Samples/Tests			Field Records
				Depth	Sample Type No.	Test	
Made Ground. (Firm brown mottled orange brown and grey clay with rare to occasional traces of orange brown silty fine sand. Abundant rootlets.)	40.11		(1.40)	0.00 - 1.20	B 1		
Made Ground. (Medium dense brown and very clayey. orange brown fine to coarse sand with a little to some fine to coarse flint gravel. Recovered with soft dark greyish brown locally sandy clay with rare red brick and flint gravel. Strong organic odour.)	38.71		1.40	1.20 - 1.65	U 2		70 blows
				1.60 - 1.75	D 3	C N=16	2,3/5,4,4,3
			(1.90)	1.80 - 3.30	B 4		
				2.80	MS 5		
Medium dense brown medium to coarse rarely fine SAND with some fine to medium flint gravel. (VALLEY GRAVEL ?)	36.81		3.30	3.30 - 3.75		C N=36	4,7/10,9,9,8
			(1.10)	3.30 - 4.40	B 6		
Stiff becoming very stiff below 6.65m brown and dark grey CLAY with abundant irregular traces and partings (<3mm) of dark grey and dark green silty fine sand. (READING BEDS)	35.71		4.40	4.40	D 7		42 blows
				4.60 - 5.05	U 8		
				5.15	D 9		
			(2.30)	5.20 - 5.65	D 10	S N=14	2,3/3,3,4,4
				6.10 - 6.55	U 11		100 blows
				6.60	D 12	S	
Very dense brown slightly silty fine to medium rarely coarse SAND with occasional lenses of dark grey (fine to coarse) sandy clay and greyish brown clay. Rare fine flint gravel. (READING BEDS)	33.41		6.70	6.70 - 7.15	D 13	S N=30	3,9/20,30 for 70mm
				6.70 - 8.20	B 15		
				7.10	MS 14		
			(3.80)	8.20 - 8.50	D 16	S 50	7,16/27,23 for 40mm
dark brown and dark grey with lenses of dark grey very silty fine sand.				8.20 - 9.70	B 17		
				9.70 - 9.95	D 18	S 35	12,19/35 for 70mm
				9.70 - 10.50	B 19		
Remarks 1. Hand dug inspection pit to 1.20m. 2. Chiselling from 2.50 to 2.80m through gravel for 30 minutes.							Logged by AM
Notes: Materials are described in accordance with Appendices. For explanation of symbols and abbreviations see Fig. 1. (c) Soil Mechanics All depths and reduced levels in metres. Thicknesses given in brackets in depth column.							Scale 1:50 Fig. 2/9

 Soil Mechanics				BOREHOLE No. 181A Sheet 2 of 8			
Equipment & Methods As sheet 1		Location No. 7753 Location SU66NE 102 M4 WIDENING JUNCTIONS 8(9) TO 12 R.W.S					
Carried out for DTP (PMU)		Ground Level As sheet 1		Coordinates As sheet 1		Date	
Description	Reduced Level	Legend	Depth (Thick)	Samples/Tests			Field Records
				Depth	Sample Type No.	Test	
As sheet 1. (READING BEDS)			(3.00)	9.70 - 10.50	B 19		
	29.61		10.50	10.60 10.70 - 11.15	D 20 D 21	S N-24	2,3/5,6,7,7
Stiff dark grey very (fine to medium) sandy CLAY with occasional traces of light grey silty fine sand. Rare lenses of dark brown clay. (READING BEDS)			(1.00)	10.70 - 12.00	B 22		
	28.11		12.00	11.95 12.00 - 12.20 12.00 - 12.45 12.20	MS 23 B 25 D 24 W 26	S N-25	2,3/4,6,7,8
Very stiff dark grey mottled dark brown CLAY with rare lenses of light greyish brown clay. Occasional lenses (50mm) of grey (fine to coarse) sandy clay. (READING BEDS)			(1.90)	12.20 - 13.70	B 27		
locally light greenish grey and slightly silty.	26.21		13.90	13.70 - 14.15 14.15 14.15 - 14.40 14.15 - 15.20 15.20 - 15.45 15.20 - 16.70 16.70 - 16.95 16.70 - 18.20 18.20 - 18.50 18.20 - 19.30	U 28 D 29 D 30 B 31 D 32 B 33 D 34 B 35 D 36 B 37	S 50 S 50 S 45	150 blows 7,19/26,24 for 45mm 8,17/29,21 for 30mm 6,14/21,29 for 50mm 4,9/17,28 for 15mm
Very dense light grey locally slightly silty fine to medium SAND with traces of fine sand. (READING BEDS)			(5.20)				
	21.01		19.10	19.30 19.30 - 19.65 19.30 - 20.00	W 40 D 38 B 41	S 50	4,8/16,20,14 for 45mm
As sheet 2. (READING BEDS)			(1.70)				
Remarks							Logged by AM Scale 1:50 Fig. 2/9
Notes: Materials are described in accordance with Appendices. For explanation of symbols and abbreviations see Fig. 1. (c) Soil Mechanics All depths and reduced levels in metres. Thicknesses given in brackets in depth column.							

 Soil Mechanics				BOREHOLE No. 181A Sheet 3 of 5				
Equipment & Methods As sheet 1		Location No. 7753 Location SU 66 NE 102 M4 WIDENING JUNCTIONS 8(9) TO 12 R.W.S						
Carried out for DTP (MAU)		Ground Level		Coordinates As sheet 1		Date		
Description	Reduced Level	Legend	Depth (Thick)	Samples/Tests			Field Records	
				Depth	Sample Type	Test No.		
Very stiff (hard) green CLAY with abundant traces and partings of light green fine sandy silt. Rare pockets of black lignite. (READING BEDS)	19.31		(1.70) 20.00	19.30 - 20.00	8	41	S 50	8, 6/10, 12, 18, 19 for 50mm
with rare fine to medium gravel size green rimmed flints.								
Very stiff (hard) dark green and dark brown locally very (fine to medium) sandy CLAY with abundant disseminated dark green glauconitic sand. Occasional pockets of light greyish brown clay. Abundant shells and rare lignite. (READING BEDS)	17.71		(1.60) 22.40	20.00 - 22.30	8	43	S 50	8, 16/31, 19 for 30mm
locally stained green.								
Possibly structureless CHALK recovered as grey sandy silt sized fragments with some angular to subangular gravel size greyish white and rarely white highly to moderately weathered, weak to moderately weak fragments. Rare grey clayey staining. (UPPER CHALK)	14.11		(3.60 pen) 26.00	22.30 - 22.55	8	44	S 50	8, 16/31, 19 for 30mm
				22.40 - 23.00	8	45		
				23.00 - 24.25			N-51	4, 7/10, 12, 13, 16 No recovery
				23.00 - 25.50	8	46		
				25.50 - 25.96			S N-50	8, 9/11, 14, 19, 6 for 1mm No recovery
				25.50 - 26.00	8	47		
BOREHOLE ENDS AT 26.00 m.								
Remarks 3. Piezometer installed at 25.50m (see sheet 5).								
Notes: Materials are described in accordance with Appendices. For explanation of symbols and abbreviations see Fig. 1. (c) Soil Mechanics All depths and reduced levels in metres. Thicknesses given in brackets in depth column.								
Logged by AM Scale 1:50 Fig. 2/9								



 Soil Mechanics		BOREHOLE No.181A																																																																																																																																																																							
Sheet 4 of 5																																																																																																																																																																									
Equipment & Methods As sheet 1		Location No. 7753 Location SU66NE102 M4 WIDENING JUNCTIONS 8(9) TO 12 R.W.5																																																																																																																																																																							
Carried out for DTP (PMU)		Ground Level Coordinates Date As sheet 1																																																																																																																																																																							
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<table border="1"><thead><tr><th colspan="6">Water Level Observations During Boring</th></tr><tr><th>Date</th><th>Time</th><th>Depth of Hole (m)</th><th>Depth of Casing (m)</th><th>Depth to Water (m)</th><th>Remarks</th></tr></thead><tbody><tr><td>07.04</td><td>-</td><td>1.20</td><td>-</td><td>-</td><td>End of shift</td></tr><tr><td>08.04</td><td>-</td><td>1.40</td><td>1.20</td><td>-</td><td>Start of shift</td></tr><tr><td>08.04</td><td>-</td><td>2.00</td><td>2.20</td><td>2.40</td><td></td></tr><tr><td>08.04</td><td>-</td><td>3.20</td><td>3.20</td><td>3.80</td><td></td></tr><tr><td>08.04</td><td>-</td><td>4.00</td><td>4.00</td><td>4.60</td><td></td></tr><tr><td>08.04</td><td>-</td><td>5.40</td><td>4.60</td><td>4.60</td><td></td></tr><tr><td>08.04</td><td>-</td><td>6.30</td><td>6.00</td><td>6.70</td><td></td></tr><tr><td>08.04</td><td>-</td><td>6.70</td><td>6.00</td><td>6.70</td><td>Water strike</td></tr><tr><td>08.04</td><td>-</td><td>6.70</td><td>6.00</td><td>2.60</td><td>After 20 mins</td></tr><tr><td>08.04</td><td>-</td><td>9.90</td><td>9.70</td><td>3.10</td><td></td></tr><tr><td>08.04</td><td>-</td><td>10.90</td><td>10.70</td><td>3.60</td><td></td></tr><tr><td>08.04</td><td>-</td><td>12.20</td><td>12.00</td><td>4.10</td><td></td></tr><tr><td>08.04</td><td>-</td><td>12.20</td><td>12.00</td><td>4.10</td><td>End of shift</td></tr><tr><td>10.04</td><td>-</td><td>122.00</td><td>122.00</td><td>3.90</td><td>Start of shift</td></tr><tr><td>10.04</td><td>-</td><td>13.90</td><td>13.70</td><td>4.80</td><td></td></tr><tr><td>10.04</td><td>-</td><td>15.40</td><td>15.20</td><td>5.20</td><td></td></tr><tr><td>10.04</td><td>-</td><td>16.90</td><td>16.70</td><td>6.10</td><td></td></tr><tr><td>10.04</td><td>-</td><td>18.40</td><td>18.20</td><td>6.90</td><td></td></tr><tr><td>10.04</td><td>-</td><td>19.30</td><td>19.30</td><td>10.00</td><td>End of shift</td></tr><tr><td>13.04</td><td>-</td><td>19.30</td><td>19.30</td><td>3.30</td><td>Start of shift</td></tr><tr><td>13.04</td><td>-</td><td>21.10</td><td>20.80</td><td>4.10</td><td></td></tr><tr><td>13.04</td><td>-</td><td>22.40</td><td>22.30</td><td>4.90</td><td></td></tr><tr><td>13.04</td><td>-</td><td>23.90</td><td>23.80</td><td>5.00</td><td></td></tr><tr><td>13.04</td><td>-</td><td>25.70</td><td>23.80</td><td>5.40</td><td></td></tr><tr><td>13.04</td><td>-</td><td>26.00</td><td>23.80</td><td>-</td><td>End of borehole</td></tr></tbody></table>								Water Level Observations During Boring						Date	Time	Depth of Hole (m)	Depth of Casing (m)	Depth to Water (m)	Remarks	07.04	-	1.20	-	-	End of shift	08.04	-	1.40	1.20	-	Start of shift	08.04	-	2.00	2.20	2.40		08.04	-	3.20	3.20	3.80		08.04	-	4.00	4.00	4.60		08.04	-	5.40	4.60	4.60		08.04	-	6.30	6.00	6.70		08.04	-	6.70	6.00	6.70	Water strike	08.04	-	6.70	6.00	2.60	After 20 mins	08.04	-	9.90	9.70	3.10		08.04	-	10.90	10.70	3.60		08.04	-	12.20	12.00	4.10		08.04	-	12.20	12.00	4.10	End of shift	10.04	-	122.00	122.00	3.90	Start of shift	10.04	-	13.90	13.70	4.80		10.04	-	15.40	15.20	5.20		10.04	-	16.90	16.70	6.10		10.04	-	18.40	18.20	6.90		10.04	-	19.30	19.30	10.00	End of shift	13.04	-	19.30	19.30	3.30	Start of shift	13.04	-	21.10	20.80	4.10		13.04	-	22.40	22.30	4.90		13.04	-	23.90	23.80	5.00		13.04	-	25.70	23.80	5.40		13.04	-	26.00	23.80	-	End of borehole
Water Level Observations During Boring																																																																																																																																																																									
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07.04	-	1.20	-	-	End of shift																																																																																																																																																																				
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08.04	-	2.00	2.20	2.40																																																																																																																																																																					
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10.04	-	16.90	16.70	6.10																																																																																																																																																																					
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13.04	-	26.00	23.80	-	End of borehole																																																																																																																																																																				
Remarks																																																																																																																																																																									
Notes: Materials are described in accordance with Appendices. For explanation of symbols and abbreviations see Fig. 1. (c) Soil Mechanics All depths and reduced levels in metres. Thicknesses given in brackets in depth column.																																																																																																																																																																									
Logged by AM Scale 1:50 Fig. 2/9																																																																																																																																																																									

[illegible]

LOCATION
WORTON GRANGE PHASE 2

DATE
14th Sept 1983

BOREHOLE : 1

DESCRIPTION	REDUCED LEVEL m	DEPTH m	LEGEND	SAMPLE		THICKNESS m	SPT	REMARKS
				TYPE	DEPTH			
TOPSOIL	38.45	0.00						
Stiff brown gravelly CLAY		0.10						
SAND and GRAVEL with flints		0.50		D	0.50	8.40		--402 /1 / 0.5D
				CPT	1.0		21	
		1.70m		B	1.45			--402 /1 / 1.5B --Standing water level
		1.90m		D	2.00			--Water strike --402 /1 / 2.0D
				W	1.90	3.50		--402 /1 / 1.9W
				CPT	2.5		16	
				B	2.95			--402 /1 / 3.0B
				D	3.10			--402 /1 / 3.1D
				U100	3.40			--402 /1 / 3.4U
Stiff brown mottled CLAY		4.00		D	3.85			--402 /1 / 3.9D
				D	4.20			--402 /1 / 4.2D
				U100	4.90			--402 /1 / 4.9U
				D	5.35	3.00		--402 /1 / 5.4D
				D	5.80			--402 /1 / 5.8D
				U100	6.40			--402 /1 / 6.4U
				D	6.85			--402 /1 / 6.9D
Stiff grey mottled CLAY		7.00		D	7.20			--402 /1 / 7.2D
				U100	7.90			--402 /1 / 7.9U
				D	8.35	3.00		--402 /1 / 8.4D
				D	9.00			--402 /1 / 9.0D
				U100	9.40			--402 /1 / 9.4U
				D	9.85			--402 /1 / 9.9D
		10.00						



TERRAMECH INVESTIGATIONS. LIMITED
183 LONG LANE TILEHURST READING

REMARKS : Levels taken from bench mark on cottage on
on road going north outside the site. Value 39.29m

U100 = 100mm dia. UNDISTURBED SAMPLE
D = SMALL DISTURBED SAMPLE
SPT = STANDARD PENETRATION TEST

U38 = 38mm dia. UNDISTURBED SAMPLE
B = BULK SAMPLE
CPT = CONE PENETRATION TEST

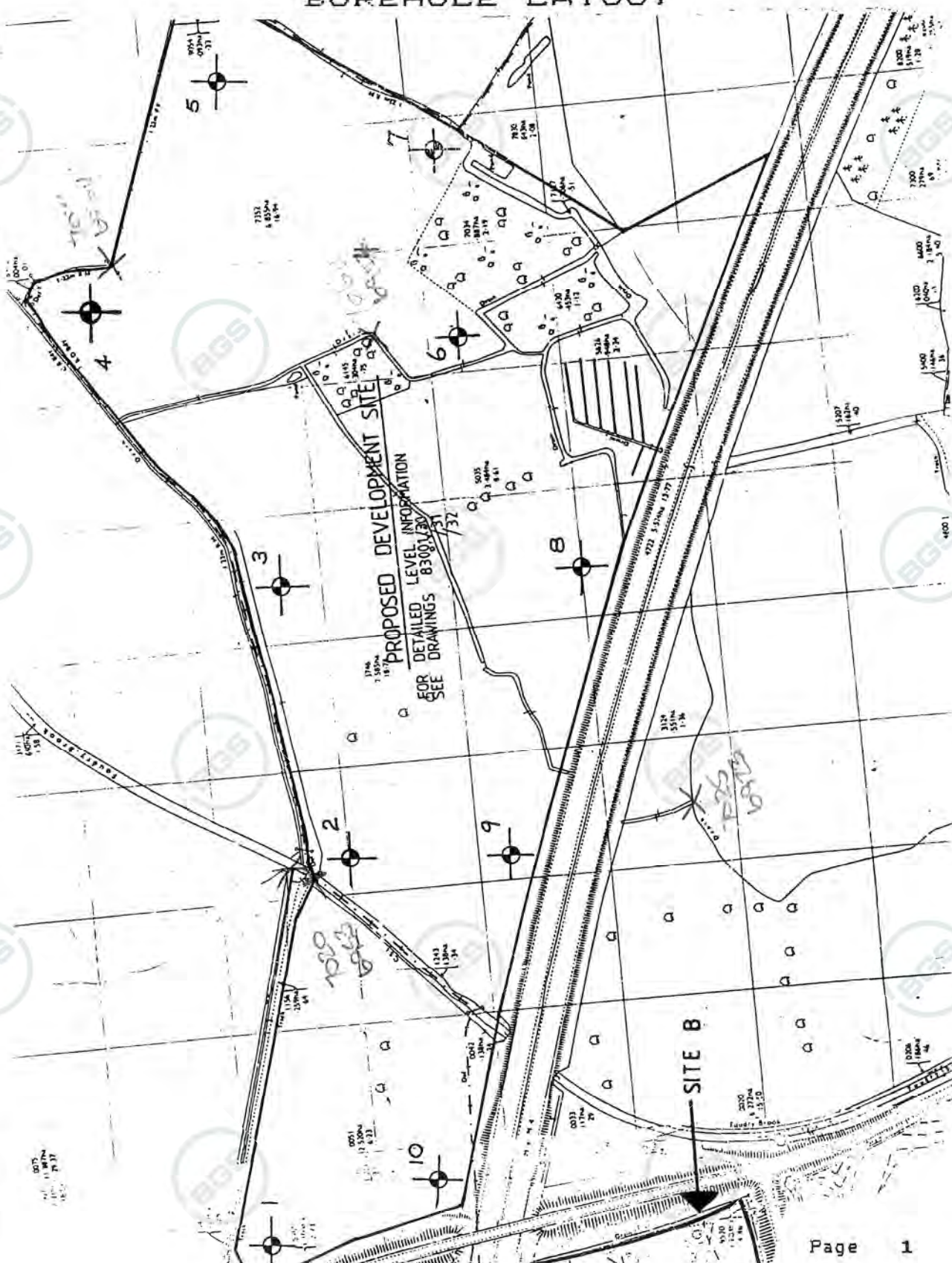
W = WATER SAMPLE Page 2

LOCATION
WORTON GRANGE PHASE 2

DATE
14th Sept 1983

B. H. LAYOUT

BOREHOLE LAYOUT



Appendix D

Zetica UXO Regional Risk Map and PDSA

UNEXPLODED BOMB RISK MAP



SITE LOCATION

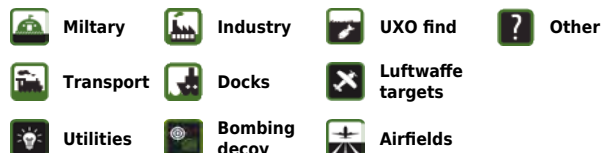
Map Centre: 469763,169688



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.



How to use your Unexploded Bomb (UXB) risk map?

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density. Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then [additional detailed research](#) is recommended.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirm that there is a low potential for UXO to be present on your site, then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

If you are unsure whether other sources of UXO may be present, you can request one of our [pre-desk study assessments \(PDSA\)](#) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 email: uxo@zetica.com web: www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the [accompanying notes on our website](#).

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgement. The copyright remains with Zetica Ltd.

PA021089 — GREEN PARK, READING

DOCUMENT DETAILS

Site name:	Green Park, Reading		
Reference:	PA021089	Client:	Arcadis
Date:	3 rd December 2024	Contact:	Shangara Naarayanan Ramakrishnan

RECOMMENDATION

While always prudent, a detailed desk study is not considered essential in this instance.

SUMMARY OF FINDINGS

Military Activity	No significant military activity affecting the Site has been identified. During WWII, several anti-invasion defences, including 1No. pillbox and an Anti-Tank (AT) ditch, were established in close proximity to the Site.
WWI Bombing	Potential targets within approximately 5km of the Site: ▪ Transport infrastructure and public utilities. ▪ Chemical, engineering, and metal works. No readily available records have been found indicating that the Site was bombed.
WWII Bombing	The Site was located in Bradfield Rural District (RD) and Wokingham Municipal Borough (MB), near Reading County Borough (CB). Bradfield RD officially recorded 170No. High Explosive (HE) bombs, with a density of 3.2 bombs per 405 hectares (ha). Wokingham MB officially recorded 11No. HE bombs, with a density of 3.2 bombs per 405ha. Reading CB officially recorded 5No. HE bombs, with a density of 0.5 bombs per 405ha. Potential targets within approximately 5km of the Site: ▪ Transport infrastructure and public utilities. ▪ Munitions factories and chemical, engineering, and metal works. ▪ Royal Air Force (RAF) Theale and RAF Smith's Lawn. ▪ Military establishments. ▪ Anti-Aircraft (AA) and anti-invasion defences. No readily available records have been found indicating that the Site was bombed.
Bombing Decoys	None identified within 5km of the Site.

FURTHER INFORMATION

These findings are based on a cursory review of readily available records; caution is advised if you plan to action work based on this PDSA.

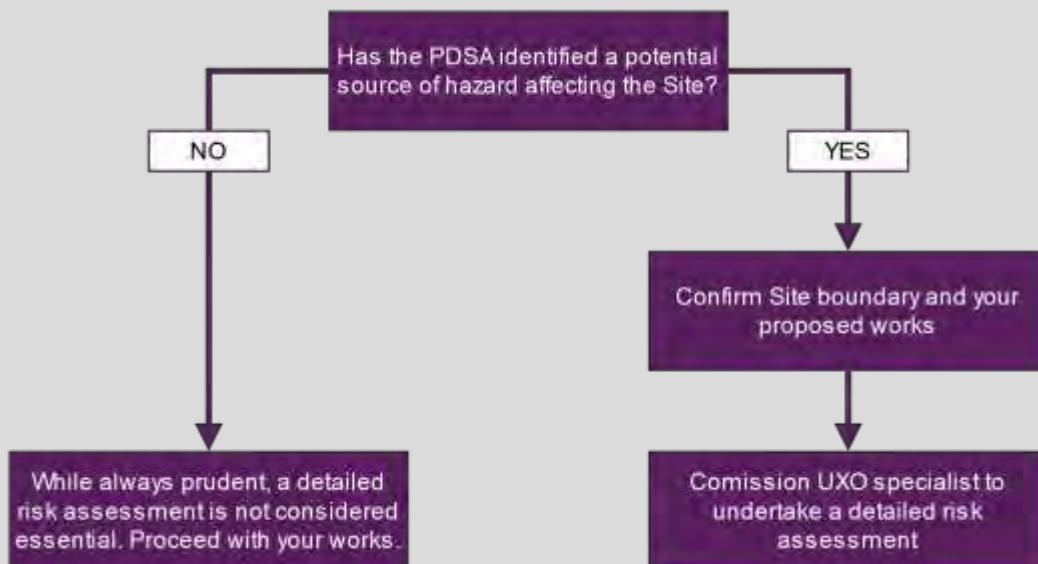
Where a potentially significant UXO hazard source has been identified on the Site, no further research has been undertaken. A detailed UXO desk study and risk assessment may identify other potential UXO hazard sources on the Site.

Visit www.zeticauxo.com to learn more about Zetica's detailed UXO desk studies and other UXO services. Click [here](#) for more information about the most common UXO hazard sources in the UK.

If you have any further queries, please don't hesitate to contact us at uxo@zetica.com or 01993 886 682.

NEXT STEPS

Follow the steps below to determine the appropriate course of action:



Potential UXO hazard identified? If the PDSA has identified a potential source of UXO hazard affecting your site, then a detailed UXO risk assessment is recommended.

No obvious source of UXO hazard? If the PDSA has not identified any obvious source of potential UXO, works can proceed.

It is good practice to raise awareness of the background UXO risk in the UK as part of a standard site induction. This will ensure that appropriate action is taken in the unlikely event that UXO is discovered.

Don't skip a stage: If you skip the detailed risk assessment stage, you could end up undertaking unnecessary work (e.g. trying to detect a UXO hazard that has already been removed).

Similarly, a detailed risk assessment might find that the UXO hazard is worse than expected and has a greater potential to cause harm, requiring a different mitigation approach than would otherwise be undertaken.

From: [PDSA](#)
To: [Ramakrishnan, Shangara Naarayanan](#)
Cc: [Uxo](#)
Subject: RE: PA021089 Pre-desk Study Assessment
Date: 03 December 2024 20:53:43
Attachments: [image006.jpg](#)
[image007.png](#)
[image009.jpg](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)
[image013.png](#)
[image014.png](#)
[image002.png](#)
[PA021089_Zetica_UXO_PDSA_Green-Park-Reading.pdf](#)

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Arcadis Warning: Exercise caution with email messages from external sources such as this message. Always verify the sender and avoid clicking on links or scanning QR codes unless certain of their authenticity.

Good afternoon Shangara

Please find the completed PDSA attached. Any further queries don't hesitate to get in touch.

Yours

Will

William Holford

Risk Assessor

Zetica Limited

T. 01993 886 682 | **E.** william.holford@zetica.com | **W.** www.zeticauxo.com | **T.** [@ZeticaUXO_](#)



From: Ramakrishnan, Shangara Naarayanan <shangaranaarayanan.ramakrishnan@arcadis.com>
Sent: Thursday, November 28, 2024 5:04 AM
To: Uxo <Uxo@zetica.com>
Subject: PA021089 Pre-desk Study Assessment

Hello,

We are from **Arcadis Consulting UK Ltd** company involved in providing sustainable design, engineering, and consultancy solutions.

Presently, we require a Preliminary Desk Study Assessment (PDSA) Report for following Site.

Through the website <https://zeticauxo.com/downloads-and-resources/risk-maps/> I came to know that the Site falls under **Low Bomb Risk area**. However, we require the PDSA report for our reference.

I have attached the Site Bomb risk map and a tentative Site boundary plan with this email. Let me know what else is needed from our end.

[Note: Please use Easting and Northing for Locating the site as it shows the exact location of the site while referring the risk map].

I have positioned the exact location by symbol (+) on the map and have attached the PDF and figures for your reference.

Address : Green Park, Reading, RG2 6AT

Coordinates : 469749 (Easting) , 169711 (Northing)

Shangara Naarayanan Ramakrishnan | M.Tech

Assistant Consultant – UK Environment, SER

Arcadis Consulting India Pvt. Ltd,

12th Floor Building Q2, Aurum Q Parc

Thane Belapur Road, Ghansoli | Navi Mumbai | 400710 | India

www.arcadis.com



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From: [PDSA](#)
To: [Ramakrishnan, Shangara Naarayanan](#)
Cc: [Uxo](#)
Subject: RE: PA021089 Pre-desk Study Assessment
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[image007.png](#)
[image009.jpg](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)
[image013.png](#)
[image014.png](#)
[image002.png](#)
[PA021089_Zetica_UXO_PDSA_Green-Park-Reading.pdf](#)

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Good afternoon Shangara

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Yours

Will

William Holford

Risk Assessor

Zetica Limited

T. 01993 886 682 | **E.** william.holford@zetica.com | **W.** www.zeticauxo.com | **T.** [@ZeticaUXO_](#)



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Shangara Naarayanan Ramakrishnan | M.Tech

Assistant Consultant – UK Environment, SER

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www.arcadis.com



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Appendix E

Photograph Log

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate 1 Description: View of site entrance looking east towards Kirton's Farm Road. Note broken gate and bund across site entrance. Fly-tipped materials also present e.g. empty jerry cans, tyres and presumed ACMs.				
Plate 2 Description: Looking south along informal access track at front of site that bounds Kirton's Farm Road. Appears to be asphalt surfacing for approximately 50m.				

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate 3 Description: View of imported soils from south-east corner of site looking west.				
Plate 4 Description: View from top of imported soils looking north-east.				

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate 5 Description: View of unnamed watercourse that runs west to east along southern boundary of site.				
Plate 6 Description: View of neighbouring field looking south. M4 embankment / gantry visible in distance.				

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate 7 Description: View of imported soils looking east towards Green Park.				
Plate 8 Description: View of imported soils looking east towards Green Park. Note ground level present in foreground.				

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate 9 Description: View of Balfour Beatty compound that bounds site to north.				
Plate 10 Description: View of stockpile in Balfour Beatty compound that bounds northern most corner of the site.				

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate 11 Description: View of demolition rubble, looking north.				
Plate 12 Description: View of brick storage tank located on northern boundary of site, looking south. Assumed to be for past agricultural purposes.				

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate 13 Description: View of Japanese Knotweed stand located on the northern edge of the demolition rubble. Looking north.				
Plate 14 Description: View of paved / block structure in southernmost adjacent field. Purpose unknown. Looking south-east.				

CLIENT:	M&G Real Estate Limited			
PROJECT:	30250853	SITE NAME:	Land at Kirtons Farm Road, Reading	
Plate15 Description: View of tipped pallets/waste in neighbouring field to south. M4 visible in distance. Looking south-west.				
Plate16 Description: View of borehole located in neighbouring southerly field. Looking south-east				

Appendix F

Environmental Risk Assessment Methodology

CONCEPTUAL SITE MODEL

General

The aim of the initial conceptual model and risk assessment is to provide a preliminary identification of the risks to controlled waters, proposed future site users and the surrounding area posed by any contamination present on site. The assessment is based on identification of 'contaminant linkages', i.e. contaminant-pathway-receptor relationships. This approach accords with the guidance that accompanies Part 2A of the Environmental Protection Act of 1990 where land is considered to be contaminated when 'significant harm' is occurring, or where there is the 'significant possibility of significant harm' or where significant pollution of controlled waters is being, or is likely to be caused. In such cases the contaminant linkage itself is defined as being 'significant'.

A source of contamination and a pathway to receptors must be present for there to be a risk. The preliminary risk assessment assesses the strength of the link between the source, the pathway and the receptor.

Source - Contaminant that has potential to cause harm to environmental receptors. In a wider sense, sources can include particular ground conditions, for example the existence of redundant footings, which have the potential to impact on development proposals.

Pathway - The route by which the source is brought into contact with the receptor. This can include the transport of contamination via groundwater, wind-blown dust, vapours, excavation and deposition etc.

Receptor - Human beings, other living organisms, physical systems and built structures that could be affected by the source. A receptor will only be affected if a pathway from the source to the receptor is present. Groundwater and surface water systems can be considered as receptors in their own right as their quality is regulated by the statutory bodies, as well as being pathways for contaminant migration to other receptors.

ENVIRONMENTAL RISK ASSESSMENT

Qualitative Methodology

The risk assessment considers the potential sources, receptors and pathways identified in the Conceptual Site Model.

The environmental assessment has been undertaken with due regard to Contaminated Land Guidance Documents issued by the Department of the Environment Food and Rural Affairs (DEFRA). The Guidance requires a risk-based approach; with the potential environmental risk assessed qualitatively using the 'source-pathway-target' contaminant linkage concept contained in Part 2A of the Environmental Protection Act. Unless specifically stated as relating to 'Contaminated Land' as defined in the Environmental Protection Act 1990 (as amended), references to 'contamination' and 'contaminants' relate in general terms to the presence of potentially hazardous substances, in, on or under the subject site.

Based on information presented in

- CIRIA C552 (2001) Contaminated Land Risk Assessment: A guide to good practice; and
- NHBC / EA/ CIEH (2008) R&D Publication 66: (Volume 1) Guidance for the Safe Development of Housing on Land Affected by Contamination
- DEFRA (2012) Environmental Protection Act 1990: Part 2A. Contaminated Land Statutory Guidance

Risk assessment considers the identified sources, the potential receptors and the pathways linking them together.

The designation of risk is based upon the consideration of both:

- a. **the severity of the potential consequence** - this takes into account both the potential severity of the hazard and the sensitivity of the receptor
- b. **the magnitude of probability** (i.e. likelihood) - this takes into account both the presence of the hazard and receptor and the integrity of the pathway

Severity (consequence) can be defined as the adverse effects (or harm) arising from a defined hazard, which impairs the quality of human health or the environment in the short or longer term. Definitions of different categories of severity are detailed in Table 1 below.

Probability can be defined as the chance of a particular event occurring in a given period of time. Definitions of different categories of probability are detailed in Table 2 below.

A contaminant linkage must first be established before tests for probability and consequence are applied. If there is no contaminant linkage then there is no potential risk.

Table 1 - Classification of Potential Consequence (Severity)

	Human Health	Controlled Water	Built Environment ¹	Ecosystems ²
Severe	Short term (acute) risk to human health. Concentrations present <u>likely</u> to result in “significant harm” as defined by Part 2A.	Substantial pollution of sensitive water resources.	Catastrophic damage to buildings, structures or the environment, including building collapse.	Major damage to aquatic or other ecosystem, which is likely to result in a substantial adverse change or irreversible change in its functioning or harm to a species of special interest.
Medium	Chronic damage to human health. Concentrations present that <u>could</u> result in significant harm.	Pollution of sensitive water resources or small scale pollution of sensitive water resources	Significant damage to buildings, structures or the environment making it unsafe to occupy, or damage that may impair a scheduled ancient monument.	Significant damage to aquatic or other ecosystems or organism forming part of an ecosystem that could endanger the long term maintenance of a population at that location.
Mild	Slight short term health effects to humans. Exposure to human health <u>unlikely</u> to lead to significant harm.	Pollution to non-sensitive water resources	Minor damage to sensitive buildings, structures, services or the environment.	Minor or short lived damage to aquatic or other ecosystems.
Minor	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.)	Insubstantial pollution to non-sensitive water resources	Easily repairable effects of damage to buildings or structures	Harm (although not necessarily significant harm which may result in financial loss or expenditure to resolve e.g. loss of plants in a landscape scheme).

1. Property includes crops including timber, produce grown domestically (gardens or allotments for consumption), livestock, other owned or domesticated animals or wild animals which are subject to shooting or fishing rights. It also includes buildings, meaning any structure or erection, but does not include plant or machinery within a building or buried services.
2. Where ecological system effects relate to a Site of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Marine Nature Reserve (MNR), and areas of Special Protection for Birds, a “European site”, or any habitat or site afforded protection under the Wildlife & Countryside Act 1981 and The Conservation of Habitats and Species Regulations 2010, i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites.

Table 2 Classification of Probability

(Only applies if there is a possibility of a contaminant linkage being present)

High likelihood	There is a contaminant linkage and an event that either appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution.
Likely	There is a contaminant linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low Likelihood	There is a contaminant linkage and circumstances are possible under which an event could occur. However it is by no means certain that even over a longer period such an event would take place and is less likely in the shorter term.
Unlikely	There is a contaminant linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

Table 3 Classification of Risk

Once the severity and probability have been classified for a contaminant linkage they can be compared to produce a risk category from very high risk to very low risk as shown in the matrix below.

Consequence				
Severe	Moderate/Low	Moderate	High	Very High
Medium	Low	Moderate/Low	Moderate	High
Mild	Very Low	Low	Moderate/Low	Moderate
Minor	Very Low	Very Low	Low	Moderate/Low
Probability	Unlikely	Low	Likely	High

Table 4 Risk Classification Descriptions

Table 4 below describes the risk classifications.

Risk Term	Description
Very High Risk	There is a high probability that significant harm could arise to a designated receptor from an identified hazard at the site without appropriate remedial action or there is evidence that significant harm to a designated receptor is already occurring.
High Risk	Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remedial action. Remediation works may be necessary in the short-term and are likely over the longer term.
Moderate Risk	It is possible that harm could arise to a designated receptor from an identified hazard. However it is either relatively unlikely that any such harm would be severe or if any harm were to occur it is more likely that such harm would be relatively mild. Some remediation work may be required in the longer term.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely, at worst, that this harm if realised would normally be mild. Any subsequent remediation works are likely to be relatively limited.
Very Low Risk	It is a low possibility that harm could arise to a receptor, but it is likely at worst, that this harm if realised would normally be mild or minor.

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