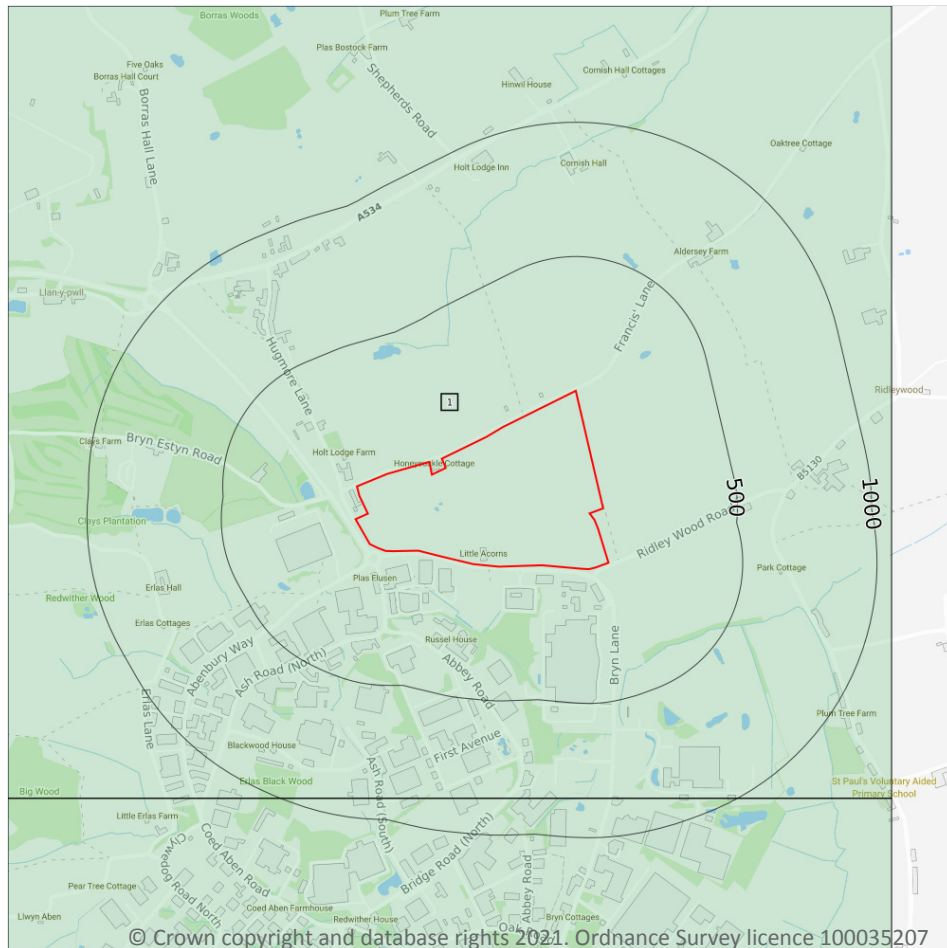


14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

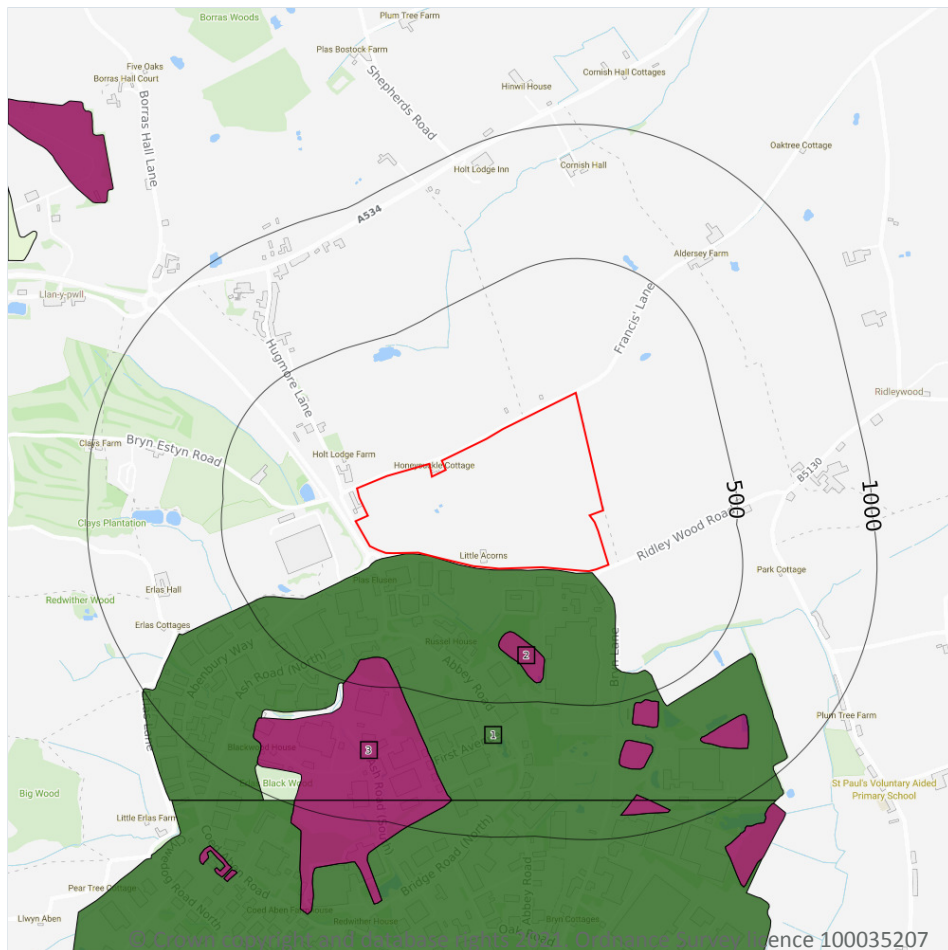
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 85**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SJ35SE

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground



- Site Outline**
- Search buffers in metres (m)**
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

3

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

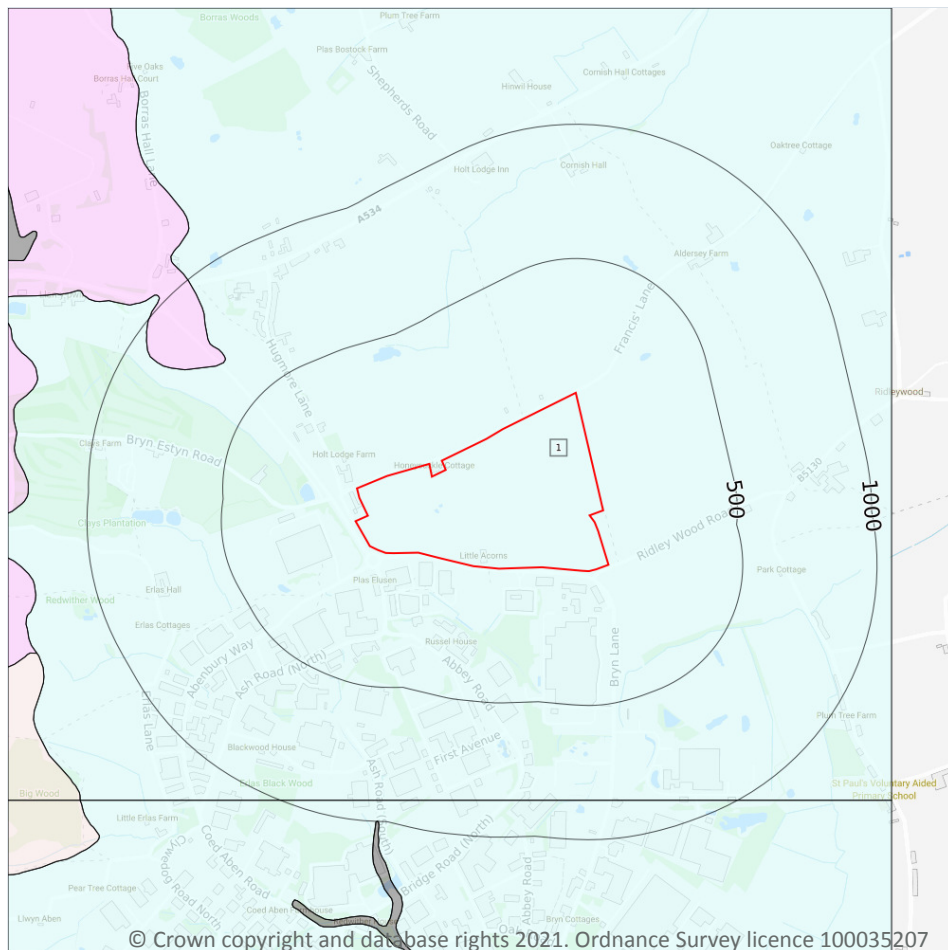
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 86**

ID	Location	LEX Code	Description	Rock description
1	1m S	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
2	236m S	MGR-UNKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
3	389m S	MGR-UNKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

1

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 87**

ID	Location	LEX Code	Description	Rock description
1	On site	TILL-DMTN	Till - Diamicton	Diamicton

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

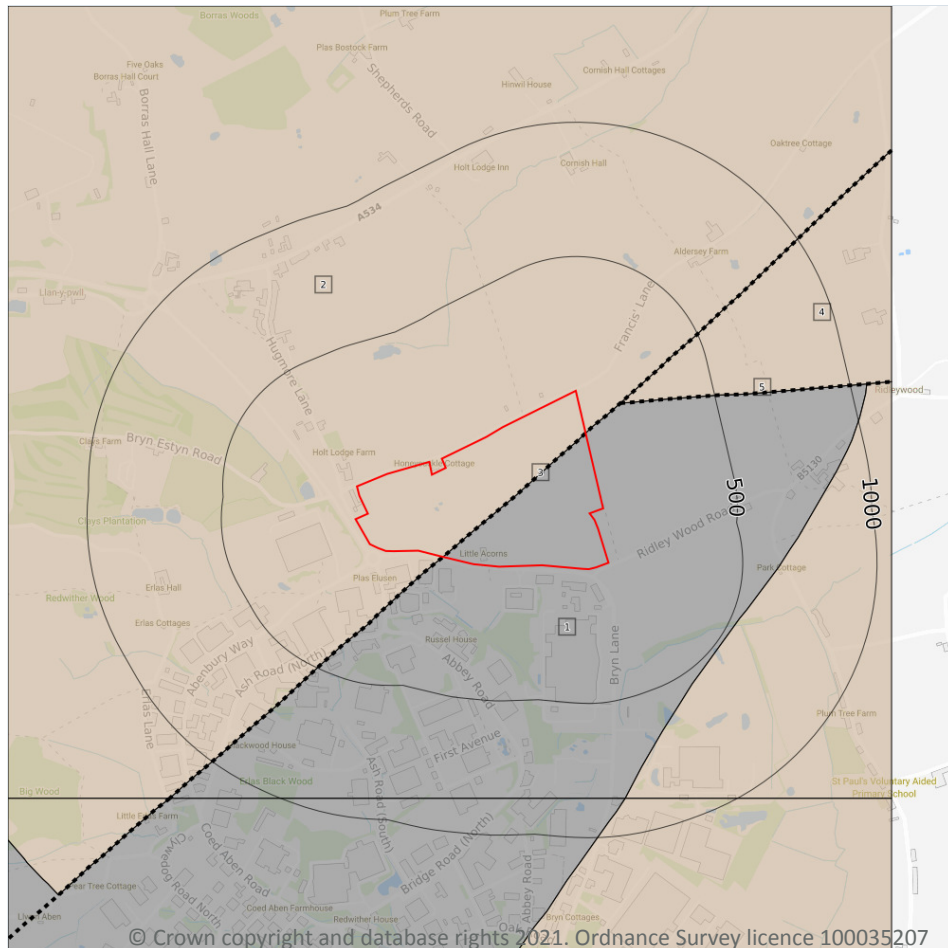
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

3

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 89**

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-MDST	Salop Formation - Mudstone	Cisuralian Epoch - Westphalian D Sub-age
2	On site	KNSF-SDST	Kinnerton Sandstone Formation - Sandstone	Early Triassic Epoch
4	152m E	KNSF-SDST	Kinnerton Sandstone Formation - Sandstone	Early Triassic Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

2

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

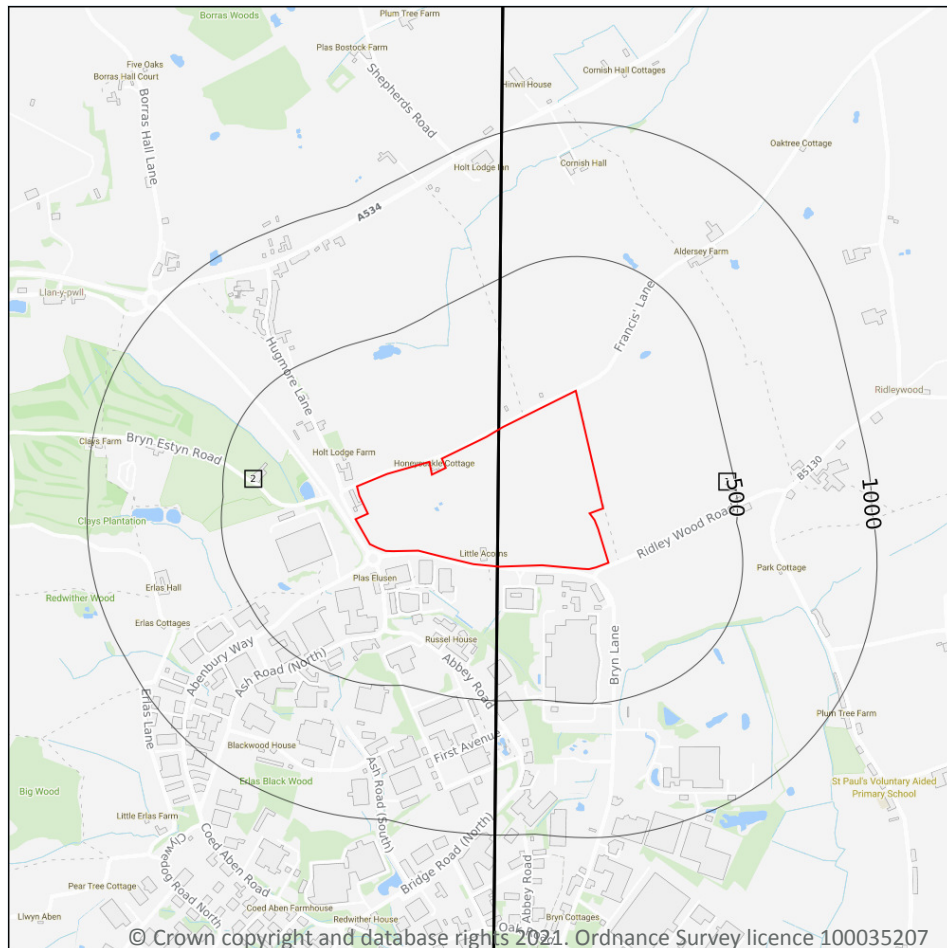
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 89**

ID	Location	Category	Description
3	On site	FAULT	Normal fault, inferred
5	152m E	FAULT	Normal fault, inferred

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

2

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

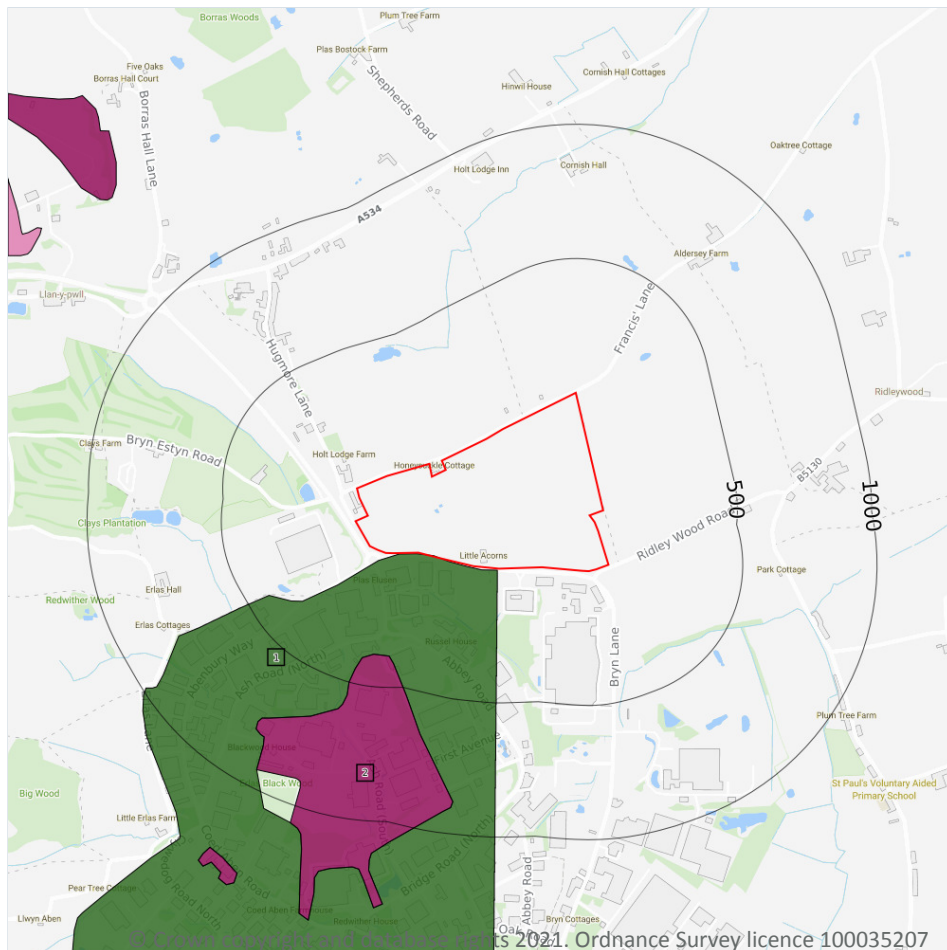
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 91**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	Full	EW122_nantwich_v4
2	On site	Full	Full	Full	Full	EW121_wrexham_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground



- Site Outline**
- Search buffers in metres (m)**
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

2

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 92**

ID	Location	LEX Code	Description	Rock description
1	On site	LSGR-ARTGR	LANDSCAPED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND
2	380m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.



15.3 Artificial ground permeability (50k)

Records within 50m

1

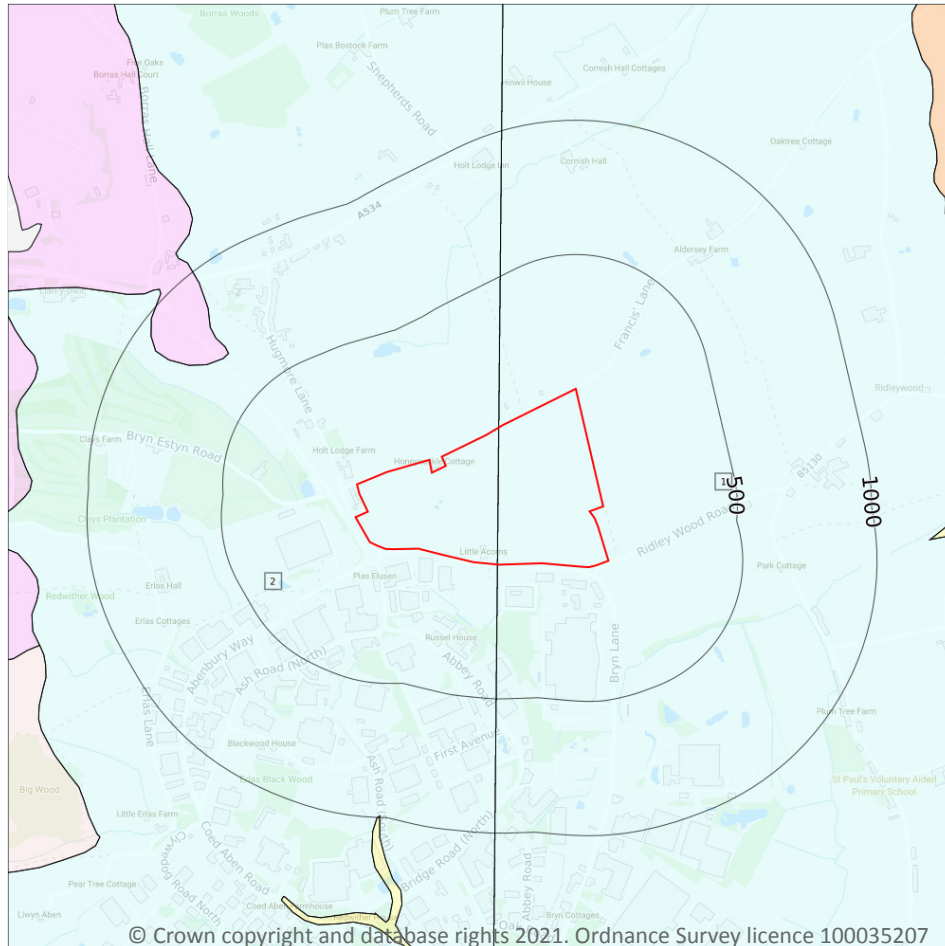
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

2

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 94**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
2	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m**0**

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

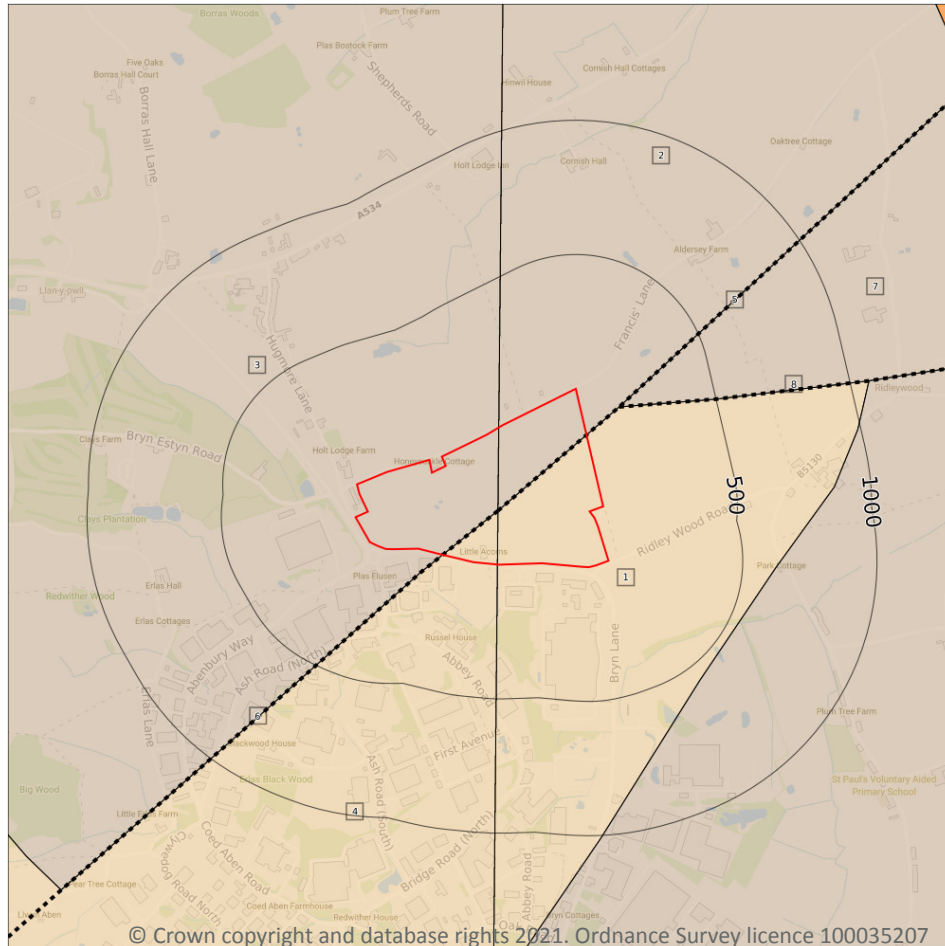
Records within 50m**0**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

5

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 96**

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-MDSC	SALOP FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
2	On site	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-
3	On site	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-

ID	Location	LEX Code	Description	Rock age
4	On site	SAL-MDSC	SALOP FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
7	142m E	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low
On site	Intergranular	High	High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

3

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

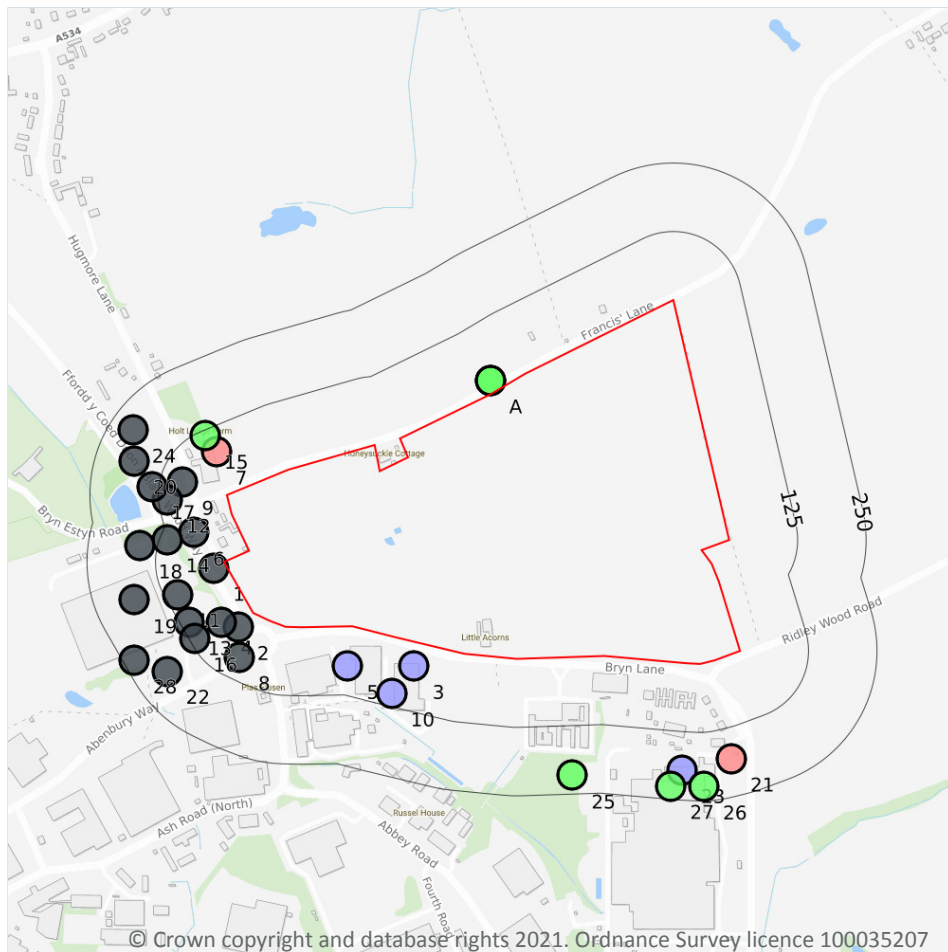
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 96**

ID	Location	Category	Description
5	On site	FAULT	Fault, inferred, displacement unknown
6	On site	FAULT	Fault, inferred, displacement unknown
8	142m E	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

30

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 98**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	21m SW	337986 351028	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD 34	-	Y	N/A
A	22m NW	338490 351370	BIESTON NO.19	18.0	N	154822
A	22m NW	338490 351370	HOLT, HOLT LODGE FARM	18.0	N	154650



ID	Location	Grid reference	Name	Length	Confidential	Web link
2	38m SW	338030 350920	WREXHAM IND EST TP 4	-	Y	N/A
3	43m S	338350 350850	RIDLEY FARM 2	5.03	N	154675
4	58m SW	338000 350930	WREXHAM IND EST 2	-	Y	N/A
5	72m S	338230 350850	RIDLEY FARM 1	4.88	N	154674
6	77m SW	337949 351093	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP37	-	Y	N/A
7	80m NW	337990 351240	COMMON WOOD FARM	61.57	N	154655
8	83m SW	338032 350866	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP40	-	Y	N/A
9	84m W	337929 351186	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP61	-	Y	N/A
10	101m S	338310 350800	RIDLEY FARM 3	5.03	N	154676
11	103m SW	337920 350980	WREXHAM IND EST TP 2	-	Y	N/A
12	109m W	337901 351152	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP36	-	Y	N/A
13	110m SW	337940 350930	WREXHAM IND EST TP 3	-	Y	N/A
14	112m W	337900 351080	WREXHAM IND EST 1	-	Y	N/A
15	115m NW	337970 351270	HOLT LODGE FARM	20.31	N	154843
16	116m SW	337950 350900	WREXHAM IND EST 3	-	Y	N/A
17	137m W	337873 351177	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD 32	-	Y	N/A
18	157m W	337850 351070	WREXHAM IND EST TP 1	-	Y	N/A
19	178m SW	337840 350970	WREXHAM IND EST 5	-	Y	N/A
20	181m W	337840 351224	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP35	-	Y	N/A
21	182m S	338930 350680	WREXHAM IND ESTATE KELLOGS 1	67.07	N	154667
22	190m SW	337900 350840	WREXHAM IND EST 4	-	Y	N/A
23	195m S	338840 350660	WREXHAM MAELOR TP 1	2.4	N	154808
24	209m NW	337838 351280	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD 31	-	Y	N/A
25	216m S	338640 350650	WREXHAM INDUSTRIAL ESTATE 7	20.0	N	154807
26	223m S	338880 350630	WREXHAM INDUSTRIAL ESTATE 2	20.0	N	154802
27	226m S	338820 350630	WREXHAM INDUSTRIAL ESTATE 3	20.0	N	154803

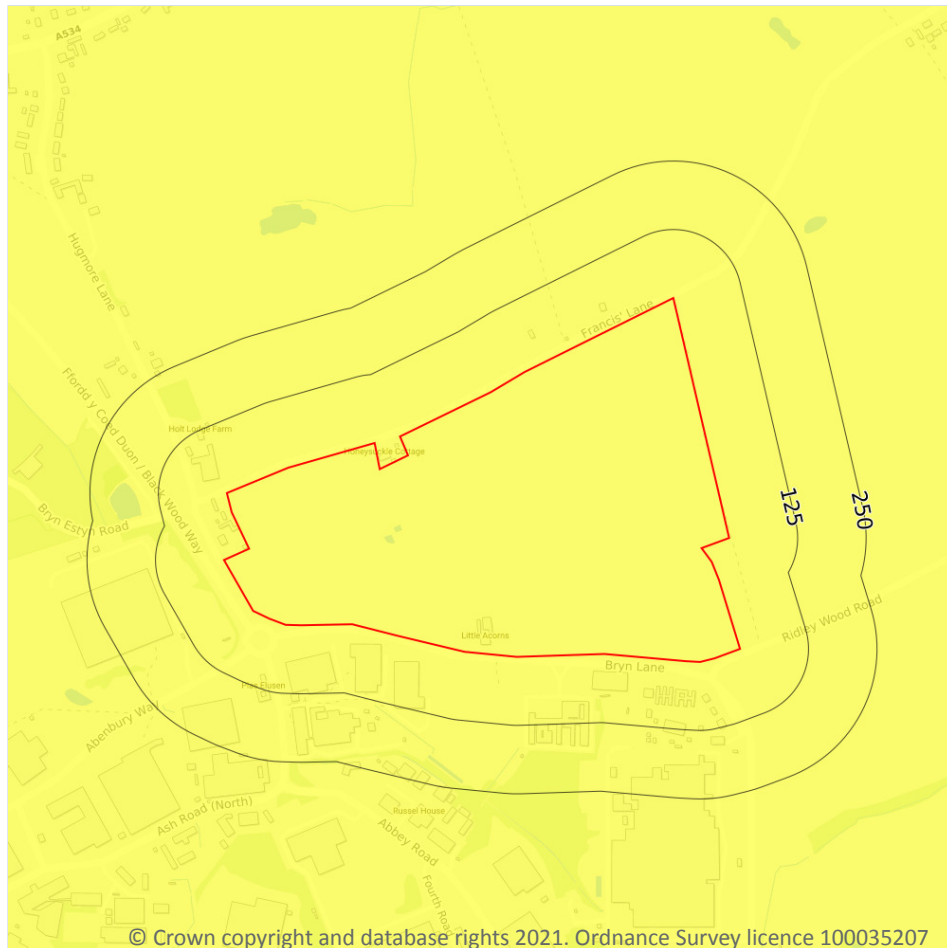


ID	Location	Grid reference	Name	Length	Confidential	Web link
28	232m SW	337840 350860	WREXHAM IND EST TP 5	-	Y	N/A

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



— Site Outline
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

17.1 Shrink swell clays

Records within 50m

1

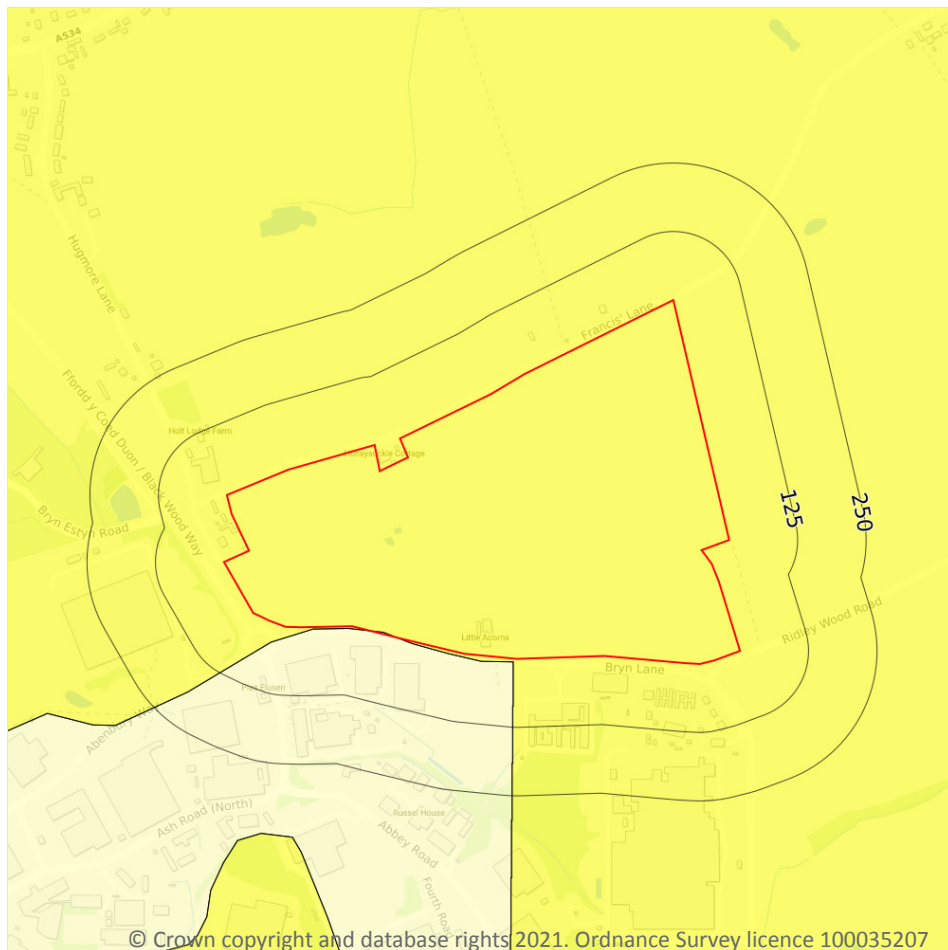
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 101**

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

2

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 102**

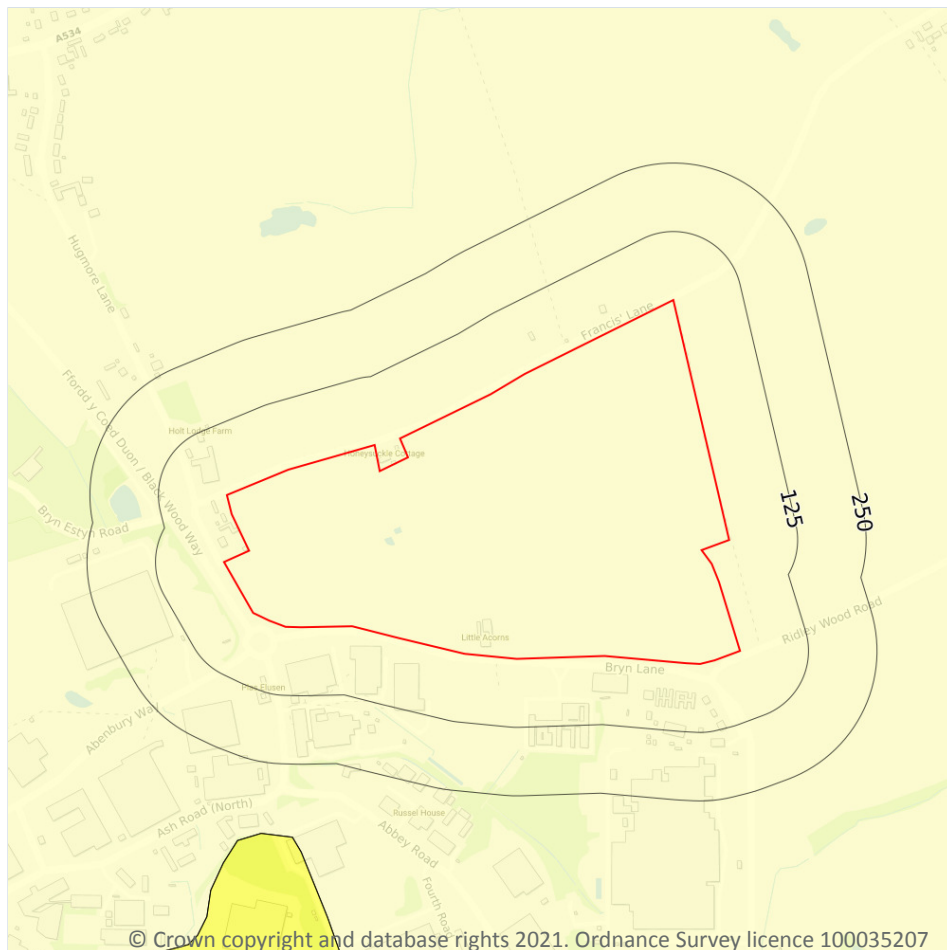
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

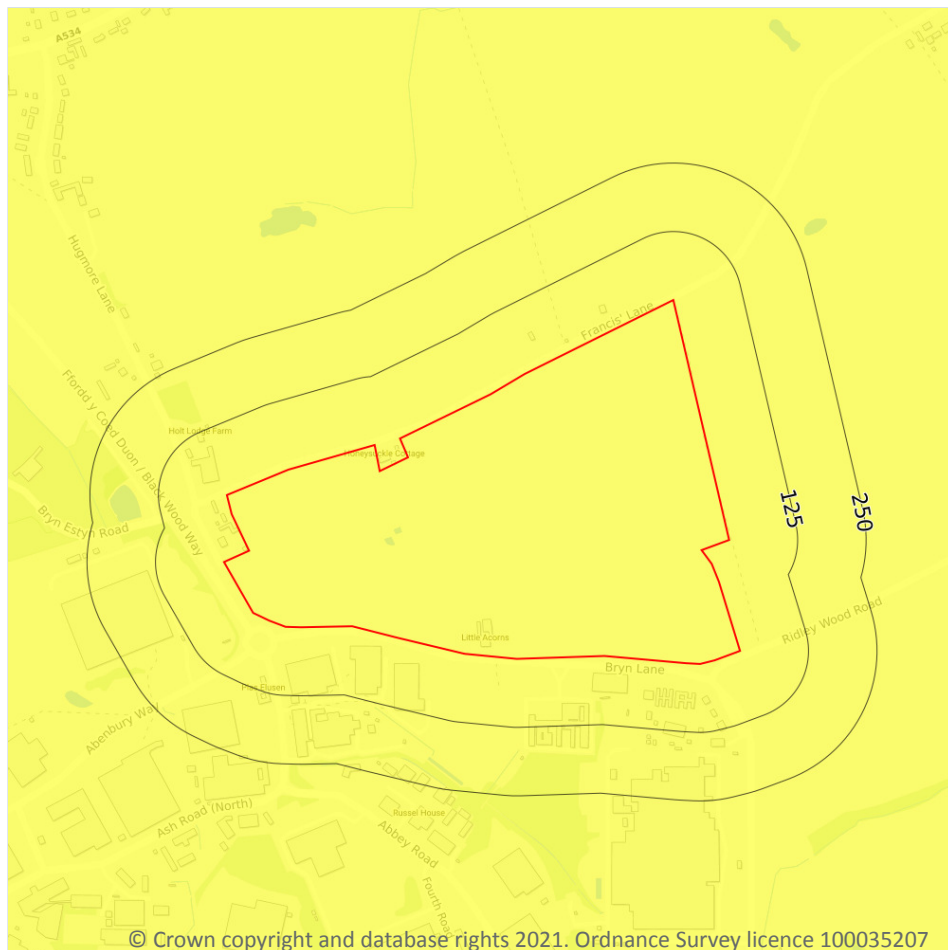
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 104**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

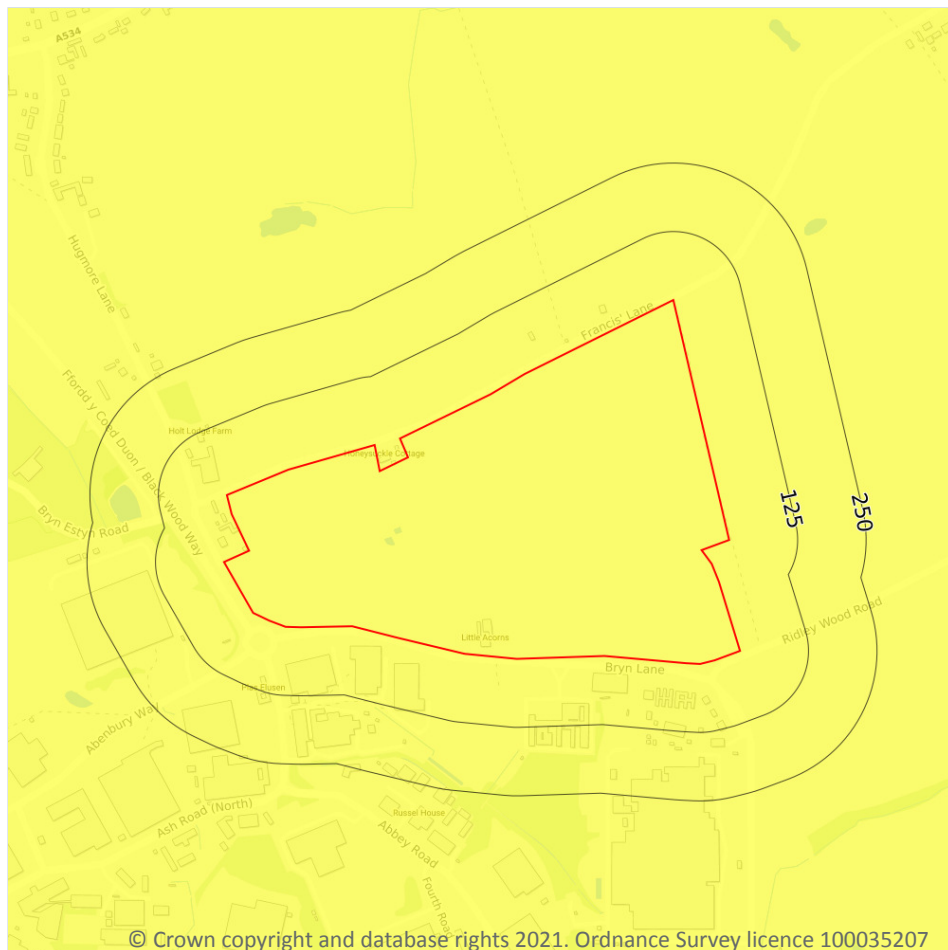
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 105**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

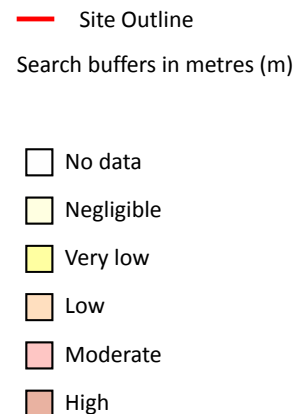
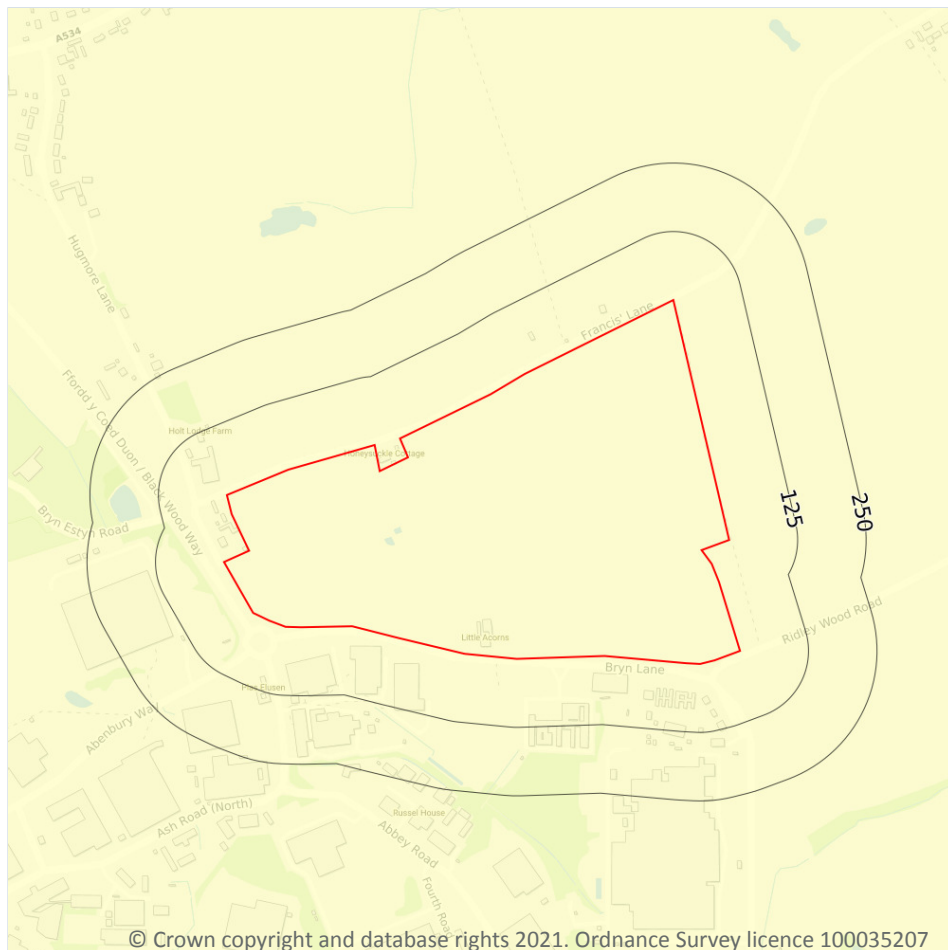
Features are displayed on the Natural ground subsidence - Landslides map on **page 106**

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

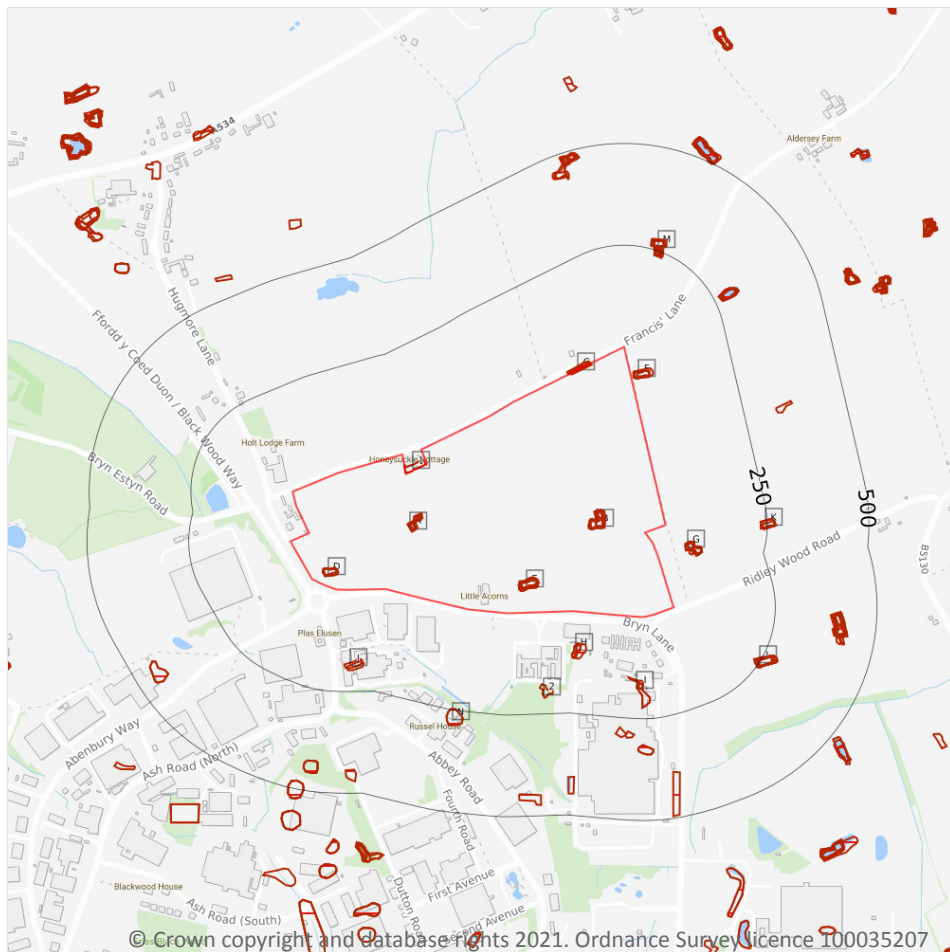
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 107**

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

72

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 109**

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Pond	1914	1:10560
A	On site	Ponds	1992	1:10000
A	On site	Ponds	1982	1:10000
A	On site	Ponds	1960	1:10560
A	On site	Ponds	1968	1:10560
A	On site	Ponds	1900	1:10560
A	On site	Ponds	1914	1:10560
B	On site	Ponds	1982	1:10000
B	On site	Ponds	1960	1:10560
B	On site	Ponds	1968	1:10560
B	On site	Ponds	1900	1:10560
B	On site	Ponds	1914	1:10560
B	On site	Ponds	1949	1:10560
B	On site	Ponds	1872	1:10560
C	On site	Pond	1982	1:10000
C	On site	Pond	1960	1:10560
C	On site	Pond	1968	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	On site	Pond	1872	1:10560
D	On site	Pond	1982	1:10000
D	On site	Pond	1960	1:10560
D	On site	Pond	1968	1:10560
D	On site	Pond	1900	1:10560
E	On site	Pond	1982	1:10000
E	On site	Pond	1960	1:10560
E	On site	Pond	1968	1:10560
E	On site	Pond	1900	1:10560
E	On site	Pond	1914	1:10560
E	On site	Pond	1949	1:10560
E	On site	Pond	1872	1:10560
C	0m NW	Pond	1914	1:10560
F	6m E	Ponds	1900	1:10560
F	8m E	Ponds	1960	1:10560
F	8m E	Ponds	1968	1:10560
F	9m E	Ponds	1914	1:10560
F	15m E	Ponds	1982	1:10000
G	67m SE	Pond	1914	1:10560
G	68m SE	Pond	1982	1:10000
G	68m SE	Pond	1960	1:10560
G	68m SE	Pond	1968	1:10560
G	70m SE	Pond	1949	1:10560
G	74m SE	Ponds	1872	1:10560
H	77m S	Pond	1914	1:10560
H	78m S	Pond	1992	1:10000
H	80m S	Pond	1949	1:10560
I	150m S	Pond	1914	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
I	163m S	Ponds	1960	1:10560
I	163m S	Ponds	1968	1:10560
J	170m S	Ponds	1900	1:10560
J	176m S	Ponds	1872	1:10560
2	177m S	Ponds	1872	1:10560
K	234m E	Pond	1914	1:10560
K	235m E	Pond	1982	1:10000
K	235m E	Pond	1960	1:10560
K	235m E	Pond	1968	1:10560
L	235m SE	Ponds	1900	1:10560
M	237m NE	Ponds	1949	1:10560
M	237m N	Ponds	1900	1:10560
K	238m E	Pond	1872	1:10560
M	238m N	Ponds	1982	1:10000
M	238m N	Ponds	1960	1:10560
M	238m N	Ponds	1968	1:10560
M	239m N	Ponds	1914	1:10560
L	240m SE	Ponds	1914	1:10560
L	240m SE	Ponds	1949	1:10560
M	241m NE	Ponds	1872	1:10560
L	245m SE	Ponds	1872	1:10560
L	246m SE	Ponds	1992	1:10000
L	246m SE	Ponds	1982	1:10000
L	246m SE	Ponds	1960	1:10560
L	246m SE	Ponds	1968	1:10560
N	247m S	Unspecified Heap	1960	1:10560
N	247m S	Unspecified Heap	1968	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m**0**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m**0**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m**0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m**0**

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site**0**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.



18.9 Coal mining

Records on site	1
-----------------	---

Areas which could be affected by past, current or future coal mining.

Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0
-----------------	---

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 Clay mining

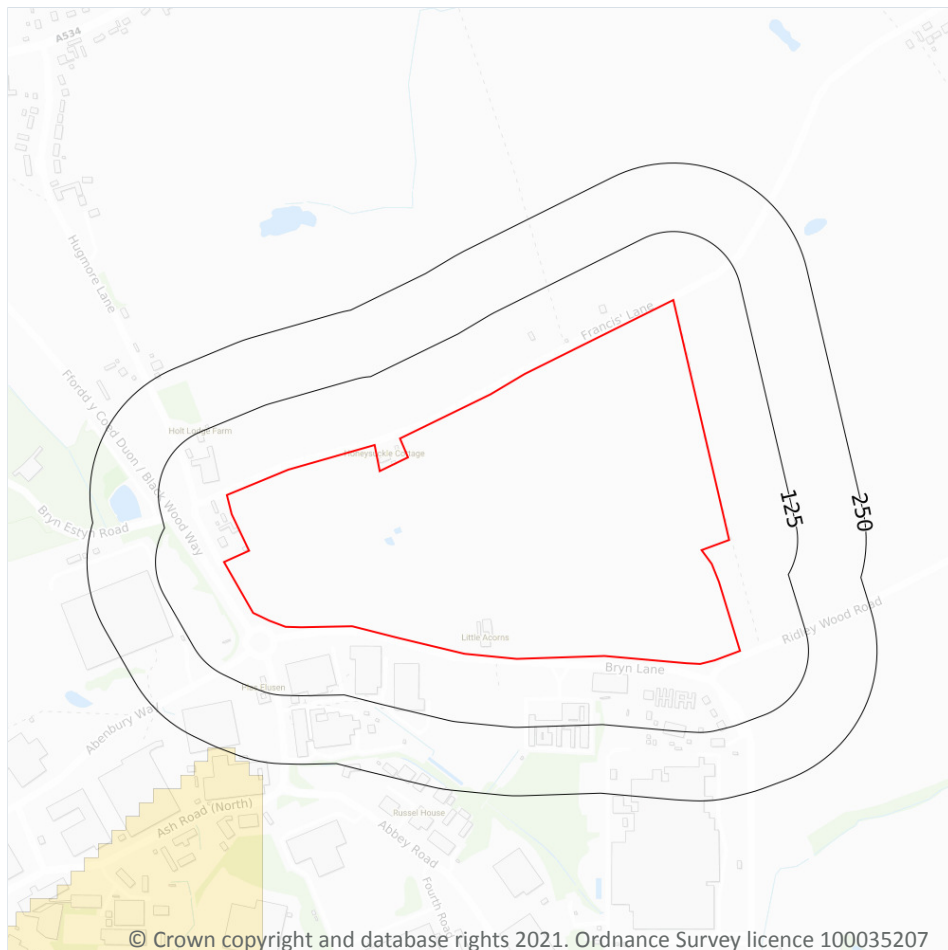
Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).



19 Radon



- Site Outline**
- Search buffers in metres (m)**
- Greater than 30%
 - Between 10% and 30%
 - Between 5% and 10%
 - Between 3% and 5%
 - Between 1% and 3%
 - Less than 1%

19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 115**

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

This data is sourced from the British Geological Survey and Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

13

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 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
4m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
23m SW	15 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.



20.2 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.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m**0**

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.

21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- 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

21.1 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.

21.2 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.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

4

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.

Features are displayed on the Railway infrastructure and projects map on **page 118**

Location	Land Use	Year of mapping	Mapping scale
197m S	Mineral Railway Sidings	1960	2500
225m S	Railway Sidings	1960	10560
225m S	Railway Sidings	1968	10560
230m S	Railway Sidings	1949	10560

This data is sourced from Ordnance Survey/Groundsure.

21.5 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.



21.6 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.

21.7 Railways

Records within 250m**0**

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m**0**

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 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.

21.10 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>.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: <https://www.groundsure.com/terms-and-conditions-jan-2020/>.



APPENDIX I - PREVIOUS SITE INVESTIGATION REPORT (AVAILABLE AS A SEPARATE DOCUMENT)



PRELIMINARY RISK ASSESSMENT REPORT BRYN LANE WREXHAM

TE1624-TE-00-XX-RP-GE-001-V03

VERSION 3

19 JUNE 2023

FINAL

Prepared for:

Net World Sports

Prepared by: Spyridon Theodoridis

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DOCUMENT CONTROL

Report No. :	TE1624-TE-00-XX-RP-GE-001-V03
Report Status:	FINAL
Version No.:	3
Project Engineer:	Spyridon Theodoridis
Date of Issue:	19/06/2023

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Version No.	Description of Issue / Revision	Date of Issue	Author	Reviewed By	Approved By
1	FINAL	10/01/2021	Spyridon Theodoridis	Adrian Read	Sean Lee
2	Updated regarding proposed development and River Dee SAC	08/06/2023	Sean Lee	Sean Lee	Sean Lee
3	Update regarding phosphates	19/06/2023	Sean Lee	Sean Lee	Sean Lee



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EXECUTIVE SUMMARY

Introduction	Tier Environmental was commissioned by Net World Sports to undertake a desk study and Phase I Preliminary Risk Assessment for the proposed commercial development at Bryn Lane, Wrexham. The purpose of this investigation was to establish land use history and review the available information to determine the geoenvironmental setting of the Site and develop a preliminary conceptual site model with due consideration of potential soil and groundwater contamination, hazardous ground gases and mining.
Proposed land use	The proposals comprise a commercial development, including industrial and distribution, and ancillary retail/hotel floorspace.
Site location and surrounding land uses	The site is located at Bryn Lane, Wrexham, nearest post code LL13 9XW. To the north and east of the site the area is agricultural with a few residential houses and Wrexham Industrial Park to the west and south of the site and the Clays Golf Driving Range and golf Course is west of the site. There are no nearby significant current land uses in the vicinity of the Site.
Site history	The Site was historically agricultural with approximately 3 No. wells identified in the southern part of the Site. Pond locations and sizes are shown to vary over time indicating the potential for some of them to have been potentially infilled. Ridley View (shown in the present day location of Little Acorns) was developed in the south by 1992 (residential / farm). Pertinent surrounding land uses include farms, the Royal Ordnance Factory (Wrexham) to the south of the Site (as close as 20m south) and associated buildings and tanks etc, a clothing factory to the south (60m south), Wrexham Industrial Estate (25m south at its closest point). Given that the Site itself did not form part of the ROF Wrexham site it is not considered that there are any risks from explosives at the Site.
Geology, Hydrogeology and Hydrology	No previous ground investigation reports have been provided to Tier Environmental; however, available BGS information does not indicate the presence of any artificial ground on the Site (although land immediately south is shown to comprise 'Landscaped Ground'). Localised Made Ground within the Little Acorns farm/residential property area and potentially within historically infilled ponds may be anticipated. Superficial deposits comprise a Secondary Undifferentiated Aquifer associated with Devensian Till – Diamicton which has been proven in BGS logs to comprise cohesive materials locally to depths of Circa 26 to 38m bgl which is considered sufficient to provide protection of the underlying bedrock aquifers from any vertical migration of potential contaminants of concern. Bedrock comprises a Principal Aquifer associated with Kinnerton Sandstone Formation in the western/northern parts of the Site and a Secondary A Aquifer associated with the Salop Formation comprising mudstone in the southern / southeastern part of the Site. There is a inferred fault located beneath the site orientated from southwest to northeast associated with these two bedrock formations. There is a Source Protection Zone Total Catchment 3 located beneath the Site associated with the Principal Aquifer; however, the thickness of cohesive Till above this is considered to provide sufficient protection from any shallow contaminants of concern. The nearest surface water receptor comprises an underground water course 110m west. There are no potable or non-potable water abstractions located within 1km of the Site. On this basis the controlled waters sensitivity is considered to be low. The Site is located within the phosphate sensitive freshwater catchment of the River Dee and Bala Lake Special Area of Conservation (SAC).
Ground Gases	There are no landfills located within 250m of the Site. The only viable potential source of ground gases is therefore on-site localised Made Ground / potentially infilled ponds and off-site Made Ground.
Radon Requirements	The Site is not located within a high risk radon area and therefore basic radon protection measures are not currently required for the proposed development. Testing existing buildings and fitting radon prevention in new buildings might still be considered, particularly if there is a high risk location such as a routinely occupied basement.
Ecological Sensitivity	The Site does not lie within an ecologically sensitive area.
Potential contaminative features	There are 4 No unspecified tanks south of the Site within 250m. A farm is located in the southern part of the Site. Numerous potentially infilled ponds have been identified within the site.
Mining and quarrying	The Site is not located within a mining area or an area subject to historic quarrying.
Previous investigations	Tier Environmental is not aware of any previous intrusion ground investigations within the site.
Phosphates	The Site is located within the River Dee and Bala Lake Designated Special Area of Conservation (SAC). The drainage strategy/design for the proposed development should therefore incorporate appropriate on-site and/or off-site mitigation measures which should be agreed with the regulatory authorities.
Unexploded Ordnance	The UXO risk is considered to be low based on publicly available maps; however, given the proximity of the former Royal Ordnance Factory, Wrexham immediately south of the Site it is recommended that a detailed UXO desk study is carried out for the Site.



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Preliminary Conceptual Site Model Summary	Moderate / low to moderate risks have been identified for human health receptors and low risks have been identified for the controlled waters environment from inorganic, organic and asbestos impacts within any localised Made Ground associated with the former agricultural land use and farm in the south of the Site and any potentially infilled ponds. Moderate / low risks to human health have been identified from the off-site former ROF Wrexham located immediately south of the Site. Moderate to moderate / low risks have been identified associated with hazardous ground gases generated from on-site localised Made Ground / potentially infilled ponds and off-site Made Ground. Low risk has been identified with regard to phosphates within treated wastewater affecting the River Dee and Bala Lake SAC.
Waste Soils Classification	Based on the history of the Site and the anticipated potential contaminants of concern, it is unlikely that significant quantities of hazardous waste soil materials will be encountered; however, some may be locally present beneath some areas of the Site (potential infilled ponds and asbestos containing materials within demolition rubble at gate entrances). This will be subject to confirmatory investigation, sampling, laboratory analysis and waste classification in accordance with the Guidance on the Classification and Assessment of Waste (WM3).
Materials re-use	Subject to volumetric fill requirements and a future assessment of suitability of re-use (both chemically and geotechnically), some materials <i>may</i> be considered for potential re-use in line with an appropriate end-of-waste protocol such as WRAP Quality Protocol for Aggregates from Inert Waste, U1 Exemption or a Materials Management Plan in accordance with the CL:AIRE Definition of Waste Code of Practice (DoWCoP).
Further works	An intrusive ground investigation is currently underway that will further refine the preliminary conceptual site model and confirm the baseline phosphate concentrations across the site. It is recommended that a full UXO desk study is carried out for the Site.



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1. INTRODUCTION

Tier Environmental was commissioned by Net World Sports to undertake a Land Contamination Risk Management (LCRM) Preliminary Risk Assessment for an area of land referred to as Bryn Lane, Wrexham, located at Bryn Lane, Wrexham, nearest post code LL13 9XW (the "Site").

The proposals comprise a commercial development, including industrial and distribution, and ancillary retail/hotel floorspace. The description of development as it appears on the hybrid planning application is as follows:

"Hybrid planning application seeking:

- Full planning permission for the severable and phased construction of employment floorspace (Use Class B1c/B2/B8) and the provision of associated infrastructure including earthworks, sub-station, parking, landscaping, access from Industrial Estate Road roundabout and internal estate road; and,*
- Outline planning permission for the severable and phased construction of employment floorspace (Use Class B1c/B2/B8) with ancillary (integral) office floorspace (Use Class B1a), ancillary retail and drive thru facilities, a hotel and petrol filling station (A1, A3, C1, sui generis) and associated infrastructure including access and internal estate road, parking, and landscaping (all matters are reserved for future determination)."*

This Phase I Preliminary Risk Assessment has been designed in order to review the current Site use, the Site history and the environmental setting in order to develop a preliminary conceptual model and define a strategy and proposed scope for a Phase II Site Investigation to further assess any potential contamination risks beneath the Site.

The full title of this report, a 'Stage 1 - LCRM Tier 1 Preliminary Risk Assessment Report', is in accordance with that described in the Land Contamination Risk Management guidance (available at <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>) which has superseded CLR 11.

1.1. Proposed Development

Under current proposals the development will comprise commercial development, including industrial and distribution and ancillary retail/hotel, as presented in Appendix A. As such, in accordance with the 'Updated technical background to the CLEA model' (Environment Agency, 2009) and 'Suitable 4 Use Levels' (LQM / CIEH 2015) the proposed generic land use for this development is commercial/industrial.

1.2. Previous Reports

No previous pertinent reports pertaining to this Site have been made available.

1.3. Objectives

Taking into account the proposed development of the Site, the objectives of this appraisal were:

- To determine the historical and current land use.
- To establish the environmental setting of the Site.
- To evaluate whether past mining or other extractive industries could have an influence on the Site.



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- To determine likely ground and groundwater conditions.
- To determine the potential risks to human health and the wider environment.
- To determine potential risks posed to the Site from hazardous ground gases and / or vapours.
- To derive a Preliminary Conceptual Site Model.

1.4. Assumptions

The following assumptions are made in this report:

- It is assumed that ground levels will not change significantly from those described in this report or as shown on proposed development drawings. If this is not the case, then amendments to the recommendations made in this report may be required.
- Any references to observations of suspected asbestos-containing materials are for information only and should be verified by a suitably qualified asbestos specialist and/or confirmed by laboratory analysis.
- The use of the term 'Topsoil' within this report is based on a visual identification only and that these materials have not been classified in accordance with BS3882:2015.
- The use of the terms 'shallow' and 'deep' within this report assume *typically* between ground level to circa 5.00m below ground level (bgl) for 'shallow' and greater than 5.00m bgl regarded as 'deep';
- The comments and opinions presented in this report are based on the findings of the desk study, performed by Tier Environmental. There may be other conditions prevailing on the Site which have not been revealed by this investigation and which have not been taken into account by this report at this stage.
- Responsibility cannot be accepted for any conditions not revealed by this investigation. Any diagram or opinion on the possible configuration of the findings is conjectural and given for guidance only. Confirmation of ground conditions should be undertaken if deemed necessary.

This report has been prepared for the sole use of Net World Sports. No other third party may rely upon or reproduce the contents of this report without the written approval of Tier Environmental. If any unauthorised third party comes into possession of this report, they rely on it entirely at their own risk and the authors do not owe them any Duty of Care or Skill.



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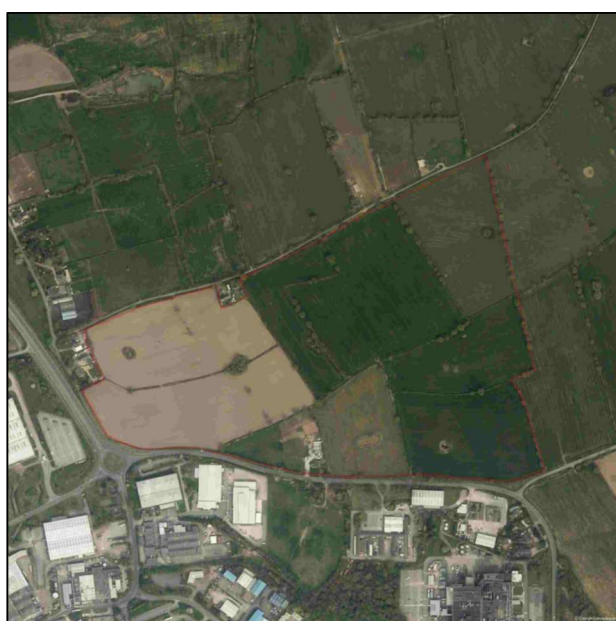
2. SITE DETAILS AND DESCRIPTION

Table 2.1 Current Site Overview.

Site name	Land north of Bryn Lane
Site address	Bryn Lane, Wrexham, nearest post code LL13 9XW. A site location plan is included as Drawing No. TE1624-TE-00-XX-DR-GE-001-V01 within Appendix A.
National Grid Reference (NGR)	338541 351126
Approximate Site area	38.93 ha
Site shape	Approximately rectangular.
Current land use on the Site	Predominantly agricultural with a residential / farm property (Little Acorns) located in the southern extent of the Site. The agricultural fields are delineated by localised copses of trees and hedgerows. The majority of the Site is grass covered grass with the exception of the area at the Little Acorns where some localised hardstanding is anticipated. Little Acorns appear to include barns and areas of equipment potentially associated with agricultural use (including a possibly horse walker). Ponds appear to be located in the western and southern parts of the Site. Underground service drawings have not been provided to Tier Environmental; however, there remains a potential for such features to be present beneath the Site.
Surrounding land uses	To the north and east of the site the area is agricultural with a few residential houses and to the south and west the area is commercial. The Wrexham Industrial Park is south of the site and the Clays Golf Driving Range and golf Course is located further west of the site.
General topography and ground levels	The land slopes from approximately 40m AOD in the west to between 27 and 31m AOD in the east and northeast which follows the general topographical trend in the surrounding area.

An aerial photograph (from the Groundsure report) of the Site and site boundary is shown below. Relevant Site photographs are presented in Appendix B.

Figure 2.1 Recent Aerial Photograph from Groundsure





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3. SITE HISTORY

3.1. Site History Review

Extracts of Ordnance Survey (OS) plans dated from 1872 to 2021 were reviewed. These were obtained as part of the Groundsure report for the Site, which is presented in Appendix C.

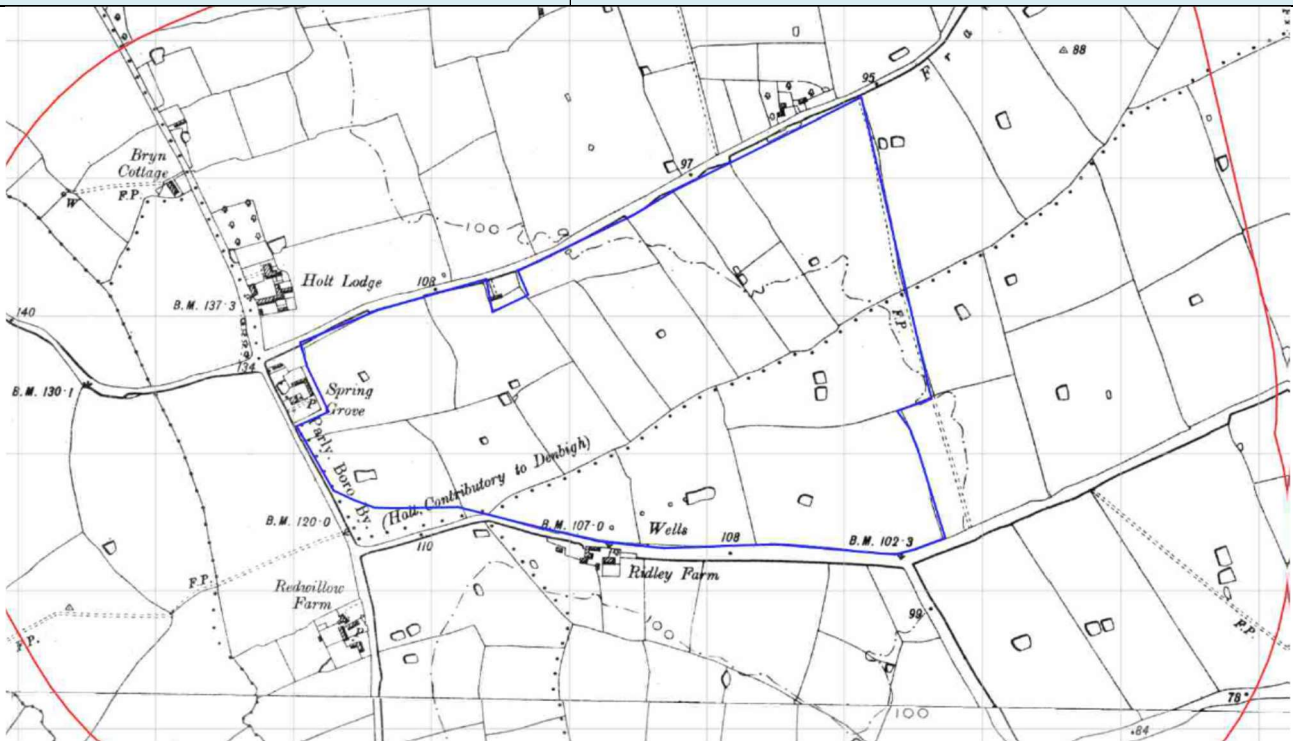
Table 3.1 below presents a summary of the main aspects of the Site relevant to the current and proposed future end uses. It is not the intention of this report to describe in detail all of the changes that have occurred on or adjacent to the Site, where these are not relevant to the land use.



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Table 3.1 Site History.

Time Period	On-Site features	Off-Site features
Pre-1900	 1872	
	- The Site comprises agricultural land with numerous ponds shown. - Wells are annotated in the southern area of the Site.	Farms and potentially residential buildings are located to the north, south and west. The closest of them to the Site is the Spring Grove located immediately west of the Site and Ridley Farm located immediately south.



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Time Period	On-Site features	Off-Site features
1900 to 1939 (Pre-war period)	1914 • More pond features are shown. • No significant change	
1939 – 1945 (World War II period)	There are no Historical Maps for this period; however, it is understood that Royal Ordnance Factory Wrexham was developed on land to the southwest during the outbreak of World War II in 1939. The factory made cordite, an explosive propellant for shells.	



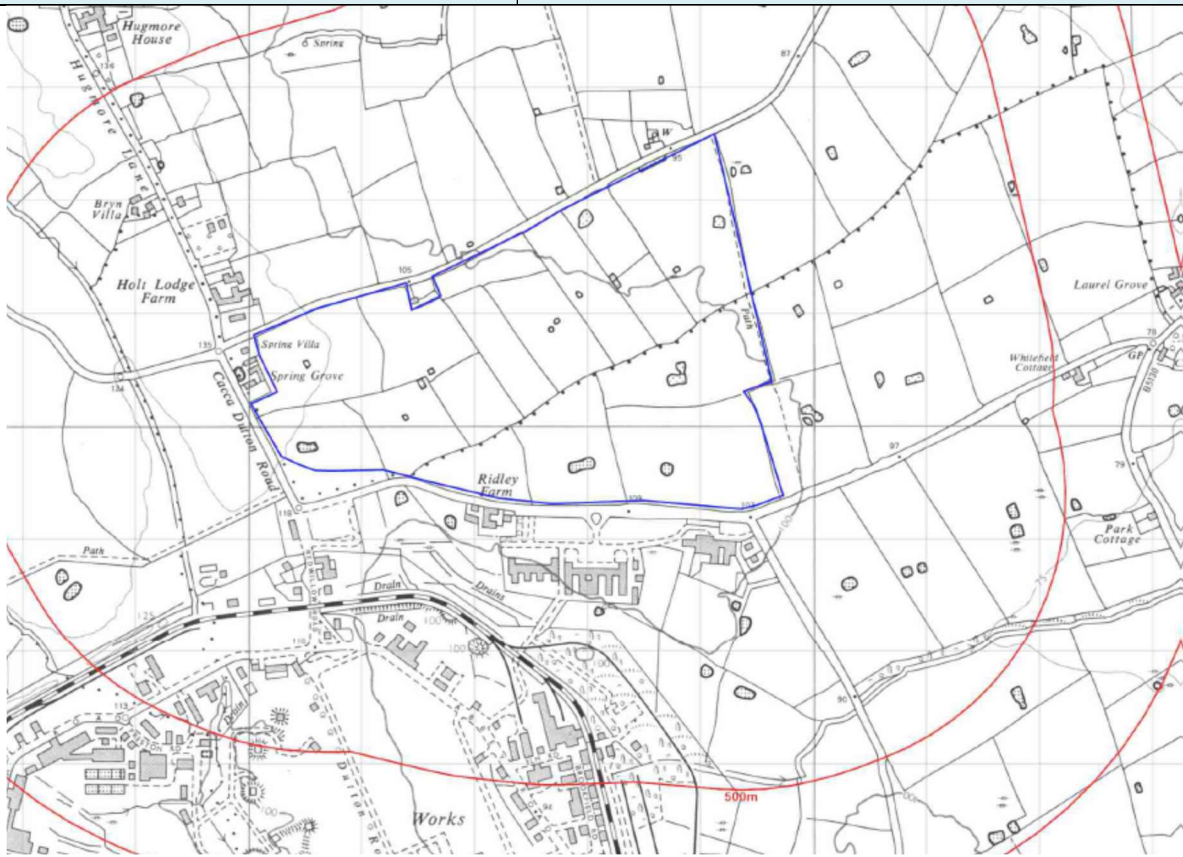
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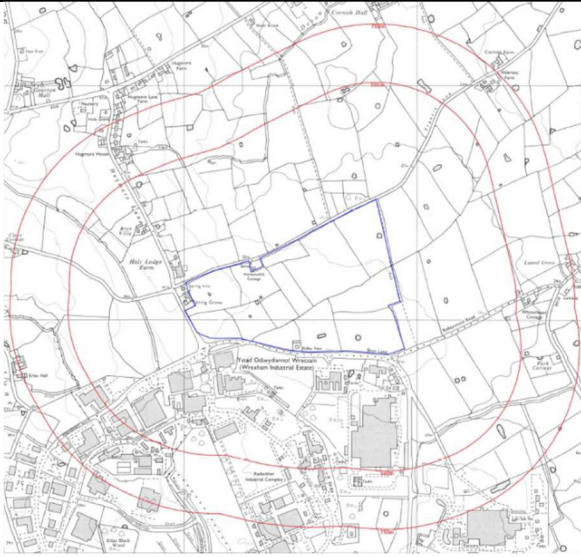
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Time Period	On-Site features	Off-Site features
1945-1980 (Post war period)	 1968	
	A number of the ponds are no longer shown and potentially have been infilled.	- South of the Site the Works area is shown and the closest building south of the Site is 20m from the Site. It is understood that many of the structures shown to the southwest comprised buildings associated with the former cordite production works on ROF Wrexham. - By 1974, a clothing factory is shown 60m south.



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Time Period	On-Site features	Off-Site features
1980 – 2000 (Late 20th century period)	 1992	
	- Ridley View (shown in the present day location of Little Acorns) has been developed by 1992. - Numerous on-site ponds are no longer shown and have been potentially infilled.	The Wrexham Industrial Estate has been developed south of the site approximately 25m to 40m south of the Site at its closest.



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Time Period	On-Site features	Off-Site features
2000 to 2020 (Modern day period)	 2021	
	No significant change	Some redevelopments of the industrial estate but broadly there has been no significant changes.



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3.2. Preliminary Unexploded Ordnance Risk Assessment

Publicly available maps from the Zetica website indicates that the Site is located within a Low Risk from UXO; however, from the historical and anecdotal evidence, the site lies to the immediate north of the former Royal Ordnance Factory, Wrexham. The land surrounding the Site may therefore have been a target for bombing during World War II.

It is therefore recommended that a UXO Desk Study is completed for the Site.



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4. ENVIRONMENTAL SETTING

4.1. Geology

Table 4.1 Geological Summary.

Maps and publications referenced	Groundsure, BGS Map sheets 121 and 122
Made ground / artificial ground	The Site isn't shown to be located within an area of artificial ground according to the Groundsure report. Given the history of development on part the Site and potential for historically infilled ponds, the presence of localised Made Ground is anticipated. Land immediately south of the Site is shown to comprise 'Landscaped Ground' according to GroundSure.
Drift geology	The Site is shown to be underlain by superficial deposits of Devensian Till – Diamicton. Cable percussion boreholes completed by Tier on the Net World Sports site immediately south of Ridley Wood Road encountered cohesive Till to greater 10m bgl. Nearby BGS logs to the southeast indicate that the Till may be circa 38m bgl whilst BGS logs to the northwest indicate the Clay extends to a depth of circa 26m bgl.
Solid geology	The western and northern/northwestern parts of the Site are shown to be underlain by the Kinnerton Sandstone Formation. The eastern and southeastern parts of the Site are shown to be underlain by the Salop Formation comprising mudstone.
Dip of solid strata	Unknown.
Faults	An inferred fault is located beneath the site orientated from southwest to northeast.
Coal seams	None shown to outcrop or subcrop on or in the immediate vicinity of the Site.

4.2. Mining and Quarrying

Table 4.2 Coal Mining Activities.

	Yes/No	Comments
Is the Site in an area of potential shallow coal workings?	No	The site does not lie within the potential zone of influence of any recorded underground coal workings. Part of the site is located within a coal mining reporting area. However a CON29M report for the site has not identified any risk from coal mining workings.
Is the Site in a high risk development area?	No	
Are there any known shafts, adits, tips, lagoons, or opencast workings likely to affect the Site?	No	No coal mine shafts and adits are recorded to lie within 20 metres of the site.
Is exploratory work required to investigate the potential risk from shallow mining or quarrying?	No	



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Table 4.3 Other Extractive Industries.

	Yes/No	Comments
Superficial drift deposits		
Evidence of extraction on or within 250 m of the Site?	Yes	Historic map from 1872 indicate the presence of 20 No ponds on Site. The most up to dated map indicate the presence of 2 ponds. In this case it is considered that 18 No ponds are potentially infilled.
Action required?	Yes	Further investigation is required to determine if any materials have been used to refill the former ponds and assess potential ground gas source potential
Solid Strata		
Any evidence of mineral extraction on or within 250 m of the Site?	No	
Action required?	No	

Other, undocumented mineral workings on or close to the Site cannot be completely dismissed.

4.3. Hydrogeology

Table 4.4 Groundwater Occurrence and Abstraction.

	Presence/location	Comments
Environment Agency aquifer designation – Superficial Deposits	On Site	Devensian Till – Diamicton: Secondary (Undifferentiated) Aquifer
Environment Agency aquifer designation – Bedrock	On Site	Principal Aquifer associated with the Kinnerton Sandstone Formation.
	On Site	Secondary A Aquifer associated with the Salop Sandstone Formation.
Groundwater vulnerability	On Site	Low Vulnerability associated with the Secondary (Undifferentiated) Aquifer, Low Vulnerability associated with the Principal Aquifer and Low Vulnerability associated with the Secondary A Aquifer.
Anticipated groundwater depth(s)	Potentially artesian	Nearby BGS borehole log SJ35SE227 approximately 110m northwest of the indicates that potentially artesian groundwater is present; however, this is likely to be associated with the underlying bedrock.
Direction of flow	Unknown	Anticipated shallow groundwater flow may be to the northeast / east following the local topography. Deeper bedrock groundwater / regional groundwater flow may be to the south towards the River Clywedog.
Current licensed abstractions – potable	NR within 2km	
Current licensed abstractions – non-potable	NR within 1km	



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	Presence/location	Comments
Private wells	Yes	1 No pump was observed on a Historical Map from 1899 415m south-west of the Site. 3 No wells were observed on a historical Map from 1900 and a Historical Map from 1912 Historical Maps on site.
Source Protection Zones	On Site	Source Protection Zone 3 Total Catchment Area located across the central, western and northern parts of the Site
Springs	10m north	1 No spring identified on the 1949 Historical Map.
	130m west	1 No spring identified on the 1949 Historical Map.
	460m north.	1 No spring identified on the 1968, 1982 and 1992 Historical Maps.

NR - none recorded.

For definition of Source Protection Zones, see Appendix F.

4.4. Hydrology

Table 4.5 Surface Water Features.

	Presence/location	Comments
Nearest surface water feature	110m west	Underground watercourse (Inland river not influenced by normal tidal action).
Other surface water features	135m to 225 south. 235m to 245m south-west.	On ground surface watercourses.
Canals, ponds, lakes, etc.	West, north and north-east within 500m. At the western part of the site.	Pond features are shown on the map.
Water Framework Directive (WFD) Surface Water Bodies	NR within 500m	
Licensed surface water abstractions	NR within 250m	
Surface run-off and Site drainage	Precise extent is unknown.	
River Dee Designated Special Area of Conservation (SAC)	River Dee 3km to the east	The Site is located within the phosphate sensitive freshwater catchment of the River Dee and Bala Lake Special Area of Conservation (SAC). Due consideration during the production of the drainage strategy and detailed design should be given with respect to this designation and any mitigation avoidance measures.

NR - none recorded. Environment Agency GQA assessments: A = very good to E = poor

4.5. Flood Risk Summary

Table 4.6 below represents a summary of the flood risk data contained within the Groundsure report obtained for the Site.

Table 4.6 Flood Risk Summary

	Presence/location	Comments
Risk of Flooding from Rivers and Sea (RoFRaS)	NR within 250m	
Historical Flood Events	NR within 250m	



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	Presence/location	Comments
Flood Defences	NR within 250m	
Areas Benefiting from Flood Defences	NR within 250m	
Flood Storage Areas	NR within 250m	
Records of Flood Zone 2	NR within 50m	
Records of Flood Zone 3	NR within 50m.	
Surface water flooding	On site	1 in 30 year, 0.3 to 1.0m
	Within 50m	
Groundwater flooding	On site	Low risk.
	Within 50m	

NR - none recorded

4.6. Environmental Designations

Table 4.7 Summary of Environmental Designations.

	Presence/location	Comments
Sites of Special Scientific Interest (SSSI)	NR within 250m	
Conserved wetland sites (Ramsar sites)	NR within 250m	
Special Areas of Conservation (SAC)	NR within 250m in the Groundsure report obtained on 25.10.2021	It is now understood that the Site is located within the phosphate sensitive freshwater catchment of the River Dee and Bala Lake Special Area of Conservation (SAC). Due consideration during the production of the drainage strategy and detailed design should be given with respect to this designation and any mitigation avoidance measures.
Special Protection Areas (SPA)	NR within 250m	
National Nature Reserves (NNR)	NR within 250m	
Local Nature Reserves (LNR)	NR within 250m	
Designated Ancient Woodland	NR within 250m	
Biosphere Reserves	NR within 250m	
Forest Parks	NR within 250m	
Marine Conservation Zones	NR within 250m	
Green Belt	NR within 250m	
Proposed Ramsar sites	NR within 250m	
Possible Special Areas of Conservation (pSAC)	NR within 250m	
Potential Special Protection Areas (pSPA)	NR within 250m	
Nitrate Sensitive Areas	NR within 250m	
Nitrate Vulnerable Zones	NR within 250m	



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	Presence/location	Comments
SSSI Units	NR within 250m	

NR - none recorded

4.7. Landfill and Waste Management Activity

Table 4.8 Waste Management Activities.

	Presence/location	Comments
Active or recent landfill	NR within 250m	
Historical landfill (BGS records)	NR within 250m	
Historical landfill (LA/mapping records)	NR within 500m	
Historical landfill (EA/NRW records)	NR within 500m	
Historical waste sites	NR within 500m	
Licensed waste sites	125m south	Name of site: Bryn Lane Composting Facility. Issue Date: 27/11/2007 Modified: 22/08/2012
	130m south	9 No entries associated with Bryn Lane Waste Recycling and Composting Facility. Issue Date 27/11/2007 Modified: 16/04/2009 Modified: 05/05/2011 Modified: 22/08/2012
Waste exemptions	245m south	Storing waste exemption. Not on a farm. Storage of waste in secure containers.
	250 south	Storing waste exemption; using waste exemption; storing waste exemption. Not on a farm; waste exemption – Agricultural; waster exemption – Non-Agricultural. Storage of waste in secure containers; use of waste derived biodiesel as fuel; storage of sludge.
Evidence of other landfilling or potential infilling on or within 250m of Site	On Site and within 250m of Site.	Numerous historical ponds that may have been potentially infilled.
Walkover evidence of fly-tipping on Site?		NR. However, it is possible to have some areas of fly tipping on site.
Is a landfill/ground gas risk assessment required?	Yes	Consideration of potential low ground gas risk should be undertaken based on the Site and surrounding land industrial history.

NR - none recorded

4.8. Local Industrial Land Uses

Other potentially contaminative activities are shown in Table 4.9 below with those features considered pertinent to the conceptual site model highlighted in **bold**. The entries relate to activities within *circa* 250 m of the Site, with the exception of COMAH facilities where the assessment is extended to a distance of *circa* 500m from the Site.



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Table 4.9 Other Potentially Contaminative Processes in the Locality

	Location	Comments
Recent and historic industrial land uses	25m south, 135m west	Electricity substation (given the low mobility of PCBs in the environment, it is not considered that this presents a risk to the site).
	55m south and 110m south	Electrical and Electronic Engineers
	95m south, 160m south and 180m to 250m south	Unspecified tanks
	100m south	Industrial Engineers and Aviation Engineers
	100m south, 150m south	Telephone exchange
	115m south	Recycling, Reclamation and Disposal
	130m south	Gas governor
	140m south	General Purpose Machinery
	180m south	Chimneys
	225m to 230m south	Railway sidings
	225m south	J C B Drivetrain Systems - Engines
	245m south	Textiles, Fabrics, Silk and Machinery
	250m south	Unspecified heap
Current or recent petrol stations	NR within 250m	
Electricity cables	NR within 500m	
Gas pipelines	NR within 500m	
Sites determined as Contaminated Land	NR within 500m	
Control of Major Accident Hazards (COMAH)	NR within 500m	
Regulated explosive sites	NR within 500m	
Hazardous substance storage/usage	NR within 500m	
Historical licensed industrial activities (IPC)	NR within 250m	
Lic Ltensed industrial activities (Part A(1))	60m south	4 No entries associated with Kellogg Company of Great Britain Ltd Date Issue: 09/11/2005 Process: Animal vegetable and food, treating etc vegetable raw materials form food. Status: Superseded Date Issue: 09/11/2005 Process: Combustion Status: Superseded Date Issue: 09/11/2005 Process: Other waste disposal, non-hazardous waste by biological treatment. Status: Superseded Date Issue: - Process: Other waste disposal; on site effluent treatment plant discharging $\geq 300\text{m}^3$. Status: Determination



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	Location	Comments
Licensed pollutant release (Part A(2)/B)	65m south	Orchid Laundry & Dry Cleaning Ltd Process: Dry Cleaning Status: Current Permit Permit Type: Part B
Radioactive Substance Authorisations	NR within 500m	
Licensed Discharges to controlled waters	NR within 250m	
Pollutant release to surface waters (Red List)	NR within 500m	
Pollutant release to public sewer	NR within 500m	
List 1 Dangerous Substances	NR within 500m	
List 2 Dangerous Substances	NR within 250m	
Pollution Incidents (EA/NRW)	180m south	Incident Date: 30/04/2015 Pollutant: Oils and Fuel Pollutant Description: Diesel Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
	200m south	Incident Date: 19/12/2013 Pollutant: Inorganic Chemicals/Products Pollutant Description: Other Inorganic Chemical or Product Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
Pollution inventory substances	NR within 500m	
Pollution inventory waste transfers	NR within 500m	
Pollution inventory radioactive waste	NR within 500m	

NR - none recorded

COMAH – Control of Major Accident Hazards (regulations); NIHHS – Notification of Installations Handling Hazardous Substances (regulations)



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4.9. Radon Risk

Table 4.10 Radon Risk Status.

	Comments
Estimated properties affected	Less than 1% of properties above the Action Level across the majority of the site. Between 1% and 3% of properties above the Action Level across the southern area of the site, likely to be associated with the Salop Formation – Mudstone, Sandstone and Conglomerate. Based on the anticipated depth of low permeability Till across the site, it is considered at this stage that radon from the bedrock strata would affect the proposed development. Testing existing buildings and fitting radon prevention in new buildings might still be considered, particularly if there is a high risk location such as a routinely occupied basement.
Radon Protection Measures required?	No



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4.10. Waste Classification and Materials Re-Use

If the Site is to be redeveloped and materials are disposed off Site, the material exported from the Site to Landfill should be hauled by a register waste character in accordance with Duty of Care Regulations 1991 and the Hazardous Waste Regulations 2005.

Based on the history of the Site and the anticipated potential contaminants of concern, it is considered unlikely that significant quantities of hazardous waste soil materials will be present, but they may be present locally beneath some areas of the Site; however, this will be subject to confirmatory investigation, sampling, laboratory analysis and waste classification in accordance with the Guidance on the Classification and Assessment of Waste (WM3).

It will be necessary to register the Site in advance of the intended reclamation works with Natural Resources Wales before disposal to landfill can take place. There will be requirement for the waste producer to provide appropriate Waste Acceptance Criteria (WAC) testing of the Soils for disposal to ensure that the soils are appropriately classified and that the landfill is licensed to receive such soils. A consignment note shall be completed, signed and retained by all parties involved. The consignment note shall state the volume of waste, a physical description of the material and statement of its chemical composition. The waste consignment notes shall be kept by the contractor for a period of at least two years.

Subject to volumetric fill requirements and a future assessment of suitability of re-use (both chemically and geotechnically), some materials *may* be considered for potential re-use in line with an appropriate end-of-waste protocol such as WRAP Quality Protocol for Aggregates from Inert Waste, U1 Exemption or a Materials Management Plan in accordance with the CL:AIRE Definition of Waste Code of Practice (DoWCoP).



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5. PREVIOUS INVESTIGATION FINDINGS

No previous desk study or site investigation reports pertaining to this Site have been made available.



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6. PRELIMINARY CONCEPTUAL SITE MODEL

Based on the information provided in the previous sections of this report a combined preliminary conceptual site model and conceptual exposure model has been developed for the proposed future land use. This summarises the understanding of surface and sub-surface features, the potential contaminant sources, transport pathways and receptors. In assessing the likely contaminants of concern present at the Site, reference has also been made to Defra and Environment Agency supporting documentation. A preliminary qualitative risk assessment has also been made of the likelihood of the linkage operating and its potential significance in accordance with CIRIA C552.

The potential pollutant linkages identified and the qualitative risk assessment for these are presented in Table 6.1 below. The terms used in the preliminary qualitative risk assessment are defined in Appendix E.

In addition to Table 6.1, it should be noted that the Site is located within the River Dee and Bala Lake Designated Special Area of Conservation (SAC). The drainage strategy/design for the proposed development should therefore incorporate appropriate on-site and/or off-site mitigation measures which should be agreed with the regulatory authorities.

6.1. Uncertainties

The following uncertainties exist in the preliminary conceptual model:

- The presence of any features unrecorded by the historic maps.
- Any unrecorded geological features.
- Any unrecorded pollution events during the Site's history.



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Table 6.1 Preliminary Assessment of Potential Pollutant Linkages.

Justification / Comments* A1:H16A2A1:F16A1:G16A2A1:F16A1:K16A1:I16A1:H16A1:H17A2A1 :F16A1:H18A1:H16	Source	Potential Contaminants of Concern	Pathway	Receptor	Consequence	Probability	Qualitative Risk Assessment
- Currently, the Site comprises predominantly agricultural use with a residential / farm property (Little Acorns) located in the southern extent of the Site. The agricultural fields are delineated by localised copses of trees and hedgerows. The majority of the Site is grass covered grass with the exception of the area at the Little Acorns where some localised hardstanding is anticipated. Little Acorns appear to include barns and areas of equipment potentially associated with agricultural use (including a possibly horse walker). Ponds appear to be located in the western and southern parts of the Site. - The Site was historically agricultural with approximately 3 No. wells identified in the southern part of the Site. Pond locations and sizes are shown to vary over time indicating the potential for some of them to have been potentially infilled. Ridley View (shown in the present day location of Little Acorns) was developed in the south by 1992 (residential / farm). - Pertinent surrounding land uses include farms, the Royal Ordnance Factory (Wrexham) to the south of the Site (as close as 20m south) and associated buildings and tanks etc, a clothing factory to the south (60m south), Wrexham Industrial Estate (25m south at its closest point). Given that the Site itself did not form part of the ROF Wrexham site it is not considered that there are any risks from explosives at the Site.	Localised Made Ground associated with the former agricultural land use and farm in the south of the Site and any potentially infilled ponds.	Possible, metal, PAH, phenol, sulphate, TPH, asbestos contamination of on-Site Made Ground .	Dermal contact, ingestion and inhalation of contaminants including contaminated dust migration during construction.	Future site users (commercial)	Medium	Likely	Moderate risk
				Adjacent site users (commercial / residential)	Medium	Low Likelihood	Moderate / low risk
			Migration via water pipes.	Construction, site investigation, demolition and future maintenance workers	Medium	Likely	Moderate risk
				Adjacent site users (commercial / residential)	Medium	Low Likelihood	Moderate / low risk
			Lateral and/or vertical migration of mobile contaminants.	Secondary Undifferentiated Aquifers	Mild	Low Likelihood	Low risk
				Secondary A and Principal Aquifer at depth	Medium	Unlikely	Low risk
				Underground watercourse located 110m west	Mild	Low Likelihood	Low risk
- No previous ground investigation reports have been provided to Tier Environmental; however, available BGS information does not indicate the presence of any artificial ground on the Site (although land immediately south is shown to comprise 'Landscaped Ground'). Localised Made Ground within the Little Acorns farm/residential property area and potentially within historically infilled ponds may be anticipated. - Superficial deposits comprise a Secondary Undifferentiated Aquifer associated with Devensian Till – Diamicton which has been proven in BGS logs to comprise cohesive materials locally to depths of Circa 26 to 38m bgl which is considered sufficient to provide protection of the underlying bedrock aquifers from any vertical migration of potential contaminants of concern. Bedrock comprises a Principal Aquifer associated with Kinnerton Sandstone Formation in the western/northern parts of the Site and a Secondary A Aquifer associated with the Salop Formation comprising mudstone in the southern / southeastern part of the Site. There is a inferred fault located beneath the site orientated from southwest to northeast associated with these two bedrock formations. - There is a Source Protection Zone Total Catchment 3 located beneath the Site associated with the Principal Aquifer; however, the thickness of cohesive Till above this is considered to provide sufficient protection from any shallow contaminants of concern. The nearest surface water receptor comprises an underground water course 110m west. There are no potable or non-potable water abstractions located within 1km of the Site. On this basis the controlled waters sensitivity is considered to be low. - There are no landfills located within 250m of the Site and the Site is not located within a high risk radon affected area. The only viable potential source of ground gases is therefore on-site localised Made Ground / potentially infilled ponds and off-site Made Ground. - The Site is located within the phosphate sensitive freshwater catchment of the River Dee and Bala Lake Special Area of Conservation (SAC). The proposed development will involve covering the site mostly in buildings and hardstanding and demolishing the farm buildings at Little Acorns. Not only will this act to inhibit infiltration into the ground, it will also largely remove the source of agricultural phosphate from the site. The site won topsoil will be reused within the development within screening bunds and soft landscaping, but agricultural fertilisers and manure will no longer be used on the site. Wastewater drainage from the proposed development will be either via the on-site combined sewer and the Five Fords WwTW or on-site wastewater treatment and discharge to the on-site surface water drainage system.	Former ROF Wrexham and associated tanks	Petroleum hydrocarbons / VOCs/SVOCs	Dermal contact, ingestion and inhalation of contaminants including contaminated dust migration during construction.	Future site users (commercial)	Medium	Low Likelihood	Moderate / low risk
				Construction, site investigation, demolition and future maintenance workers	Medium	Low Likelihood	Moderate / low risk
	On-site localised Made Ground / potentially infilled ponds and off-site Made Ground.	Hazardous ground gasses (methane, carbon dioxide, hydrogen sulphide and depleted oxygen)	Inhalation (indoor and outdoor)	Future site users (commercial)	Severe	Low Likelihood	Moderate risk
				Adjacent site users (commercial / residential)	Severe	Unlikely	Moderate / low risk
				Construction, site investigation, demolition and future maintenance workers	Severe	Low Likelihood	Moderate risk
			Migration of ground gas / explosion	Buildings and services	Severe	Unlikely	Moderate / low risk
	Phosphates from the proposed development from staff wastewater discharges containing human excreta and detergents.	Phosphates	Discharge of treated wastewater into the River Dee or tributaries	River Dee and Bala Lake SAC	Medium	Unlikely	Low risk

For definition of the terms used in the qualitative risk assessment, please see Appendix E.



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7. REGULATORY APPROVALS

The conclusions and recommendations presented above are considered reasonable based on the findings of this preliminary risk assessment. However, these cannot be guaranteed to gain regulatory approval and, therefore, the report should be passed to the appropriate regulatory authorities and/or other organisations for their comment and approval prior to undertaking any works on site.

It is recommended that conditions placed on any planning permission are discharged prior to commencement of site works.



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9. GLOSSARY OF TERMS

ACEC	Aggressive Chemical Environment for Concrete (classification)
aOD	Above Ordnance Datum
bgl	Below ground level
BGS	British Geological Survey
BRE	Building Research Establishment
CBR	California Bearing Ratio (test)
COMAH	Control of Major Accident Hazards (regulations)
Designated location	Site (and the ecosystem on that site) protected under national or international legislation. A potential ecological receptor to be considered as part of the assessment of land contamination. Example designated locations include SSSIs (q.v.), SACs (q.v.), national nature reserves, Ramsar sites and bird special protection areas.
DQA	Data Quality Assessment
DQO	Data Quality Objective
DQRA	Detailed Quantitative Risk Assessment
DWS	Drinking Water Standard
EQS	Environmental Quality Standard
GAC	Generic Assessment Criterion
GQA	General Quality Assessment (Environment Agency)
GSV	Gas Screening Value
HCV	Health Criteria Value
IPPC	Integrated Pollution Prevention and Control (regulations)
K _{ow}	Octanol-water partition coefficient
LEL	Lower Explosive Limit
LL	Liquid Limit
LoD	Limit of Detection (analytical)
LoQ	Limit of Quantification (analytical)
Mean Value Test	Statistical test (described in the CIEH Guidance) to estimate the mean value of a normally distributed population of data at a given level of confidence. Normally for contaminated land assessment, the 95th percentile (referred to as the 95%UCL or US95) is applied as a reasonable but conservative estimate of the mean concentration for comparison with the relevant assessment criteria.
Maximum Value Test	Statistical test (described in the CIEH Guidance) to identify whether an elevated concentration within a normally distributed data set forms part of the underlying population from which it has been sampled or whether it is an outlier (such as a localised area of contamination) that merits further consideration.
MC	Moisture Content
NGR	National Grid Reference
NIHHS	Notification of Installations Handling Hazardous Substances (regulations)
OS	Ordnance Survey
PI	Plasticity Index
PID	Photoionisation Detector
PL	Plastic Limit
ppm	Parts per million
ppmv	Parts per million by volume
QA	Quality Assurance
QC	Quality Control
SAC	Special Area of Conservation
SOM	Soil Organic Matter



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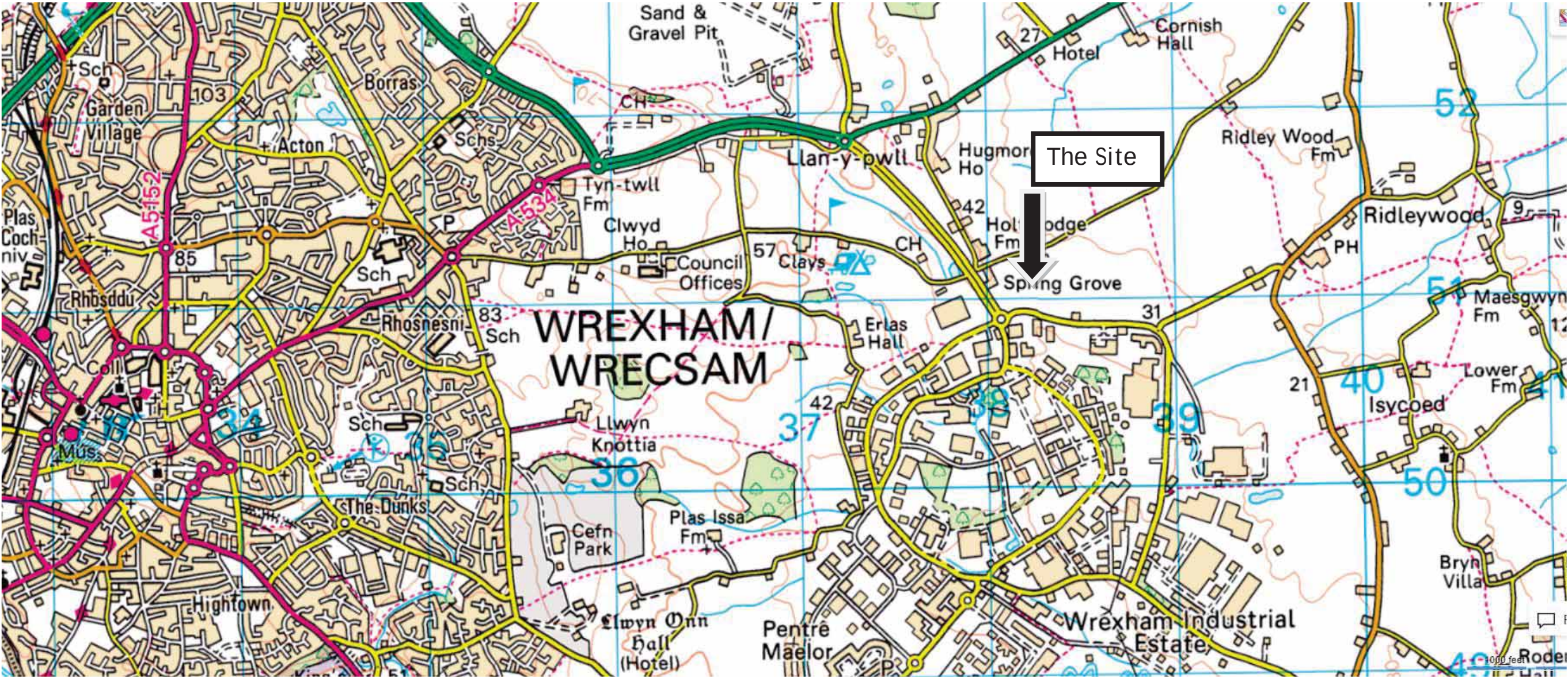
SPT	Standard Penetration Test
SPZ	Source Protection Zone (see Appendix F)
SSAC	Site-Specific Assessment Criterion
SSSI	Site of Special Scientific Interest
SVOC	Semi-Volatile Organic Compound
TEF	Toxicity Equivalent Factor
TPH	Total Petroleum Hydrocarbons
TWA	Time Weighted Average
US95	95 th percentile estimate of the true mean value of a data population (also known as 95%UCL).
VOC	Volatile Organic Compound

APPENDIX A - DRAWINGS



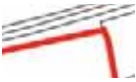
Site Location Plan

Contract Number	TE1624
Contract	Bryn Lane, Wrexham
Client	Net World Sports



Scale	NTS	
Drawn by	AR	Approved AR
Drawing Number	TE1624-TE-00-XX-DR-GE-001-V01	

KEY

 SITE BOUNDARY



U R B A N
G R E E N



SITE LOCATOIN PLAN

LAND AT BRYN LANE, WREXHAM

CLIENT:NET WORLD SPORTS DRAWN: TR CHECKED: MT APPROVED: MK

SCALE: 1:2500 @A2 DATE: 23/11/21 DRAWING NO:UG_1331_UD_DRG_SLP_02

APPENDIX B - PHOTOGRAPHS

Photograph 1:



Photograph 2:



Photograph 3:



Photograph 4: Little Acorns far / residential property



Photograph 5:



Photograph 6:



APPENDIX C - GROUNDSURE REPORT

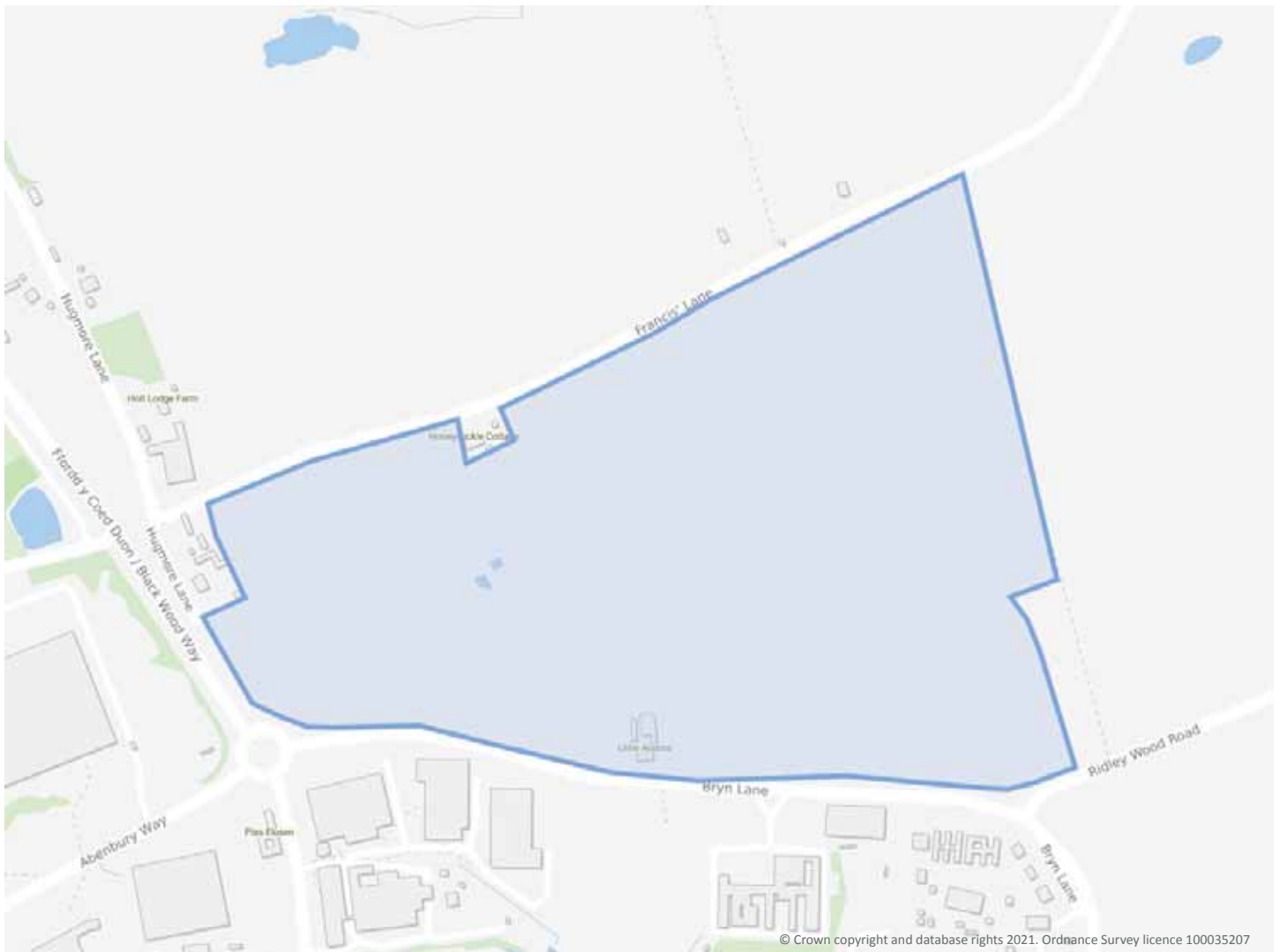
LAND NORTH OF BRYN LANE, WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9UT

Order Details

Date: 25/10/2021
Your ref: 1779_TE1624
Our Ref: GS-8287503
Client: Tier Environmental

Site Details

Location: 338541 351126
Area: 38.93 ha
Authority: [Wrexham - Wrexham County Borough Council](#)



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Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

N/A: >10ha

groundsure.com/insightuserguide

Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
<u>13</u>	<u>1.1</u>	<u>Historical industrial land uses</u>	0	0	7	9	-
<u>14</u>	<u>1.2</u>	<u>Historical tanks</u>	0	0	16	14	-
<u>16</u>	<u>1.3</u>	<u>Historical energy features</u>	0	0	0	12	-
16	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	0	0	0	-
<u>17</u>	<u>1.6</u>	<u>Historical military land</u>	0	0	1	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
<u>18</u>	<u>2.1</u>	<u>Historical industrial land uses</u>	0	0	12	16	-
<u>20</u>	<u>2.2</u>	<u>Historical tanks</u>	0	0	61	31	-
<u>23</u>	<u>2.3</u>	<u>Historical energy features</u>	0	0	0	33	-
25	2.4	Historical petrol stations	0	0	0	0	-
25	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
26	3.1	Active or recent landfill	0	0	0	0	-
26	3.2	Historical landfill (BGS records)	0	0	0	0	-
27	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
27	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
27	3.5	Historical waste sites	0	0	0	0	-
<u>27</u>	<u>3.6</u>	<u>Licensed waste sites</u>	0	0	10	7	-
<u>32</u>	<u>3.7</u>	<u>Waste exemptions</u>	0	0	4	7	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
<u>34</u>	<u>4.1</u>	<u>Recent industrial land uses</u>	0	1	23	-	-
<u>36</u>	<u>4.2</u>	<u>Current or recent petrol stations</u>	0	0	0	1	-
36	4.3	Electricity cables	0	0	0	0	-
37	4.4	Gas pipelines	0	0	0	0	-
37	4.5	Sites determined as Contaminated Land	0	0	0	0	-



37	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
37	4.7	Regulated explosive sites	0	0	0	0	-
37	4.8	Hazardous substance storage/usage	0	0	0	0	-
38	4.9	<u>Historical licensed industrial activities (IPC)</u>	0	0	0	5	-
38	4.10	<u>Licensed industrial activities (Part A(1))</u>	0	0	4	30	-
44	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	1	9	-
46	4.12	Radioactive Substance Authorisations	0	0	0	0	-
46	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	0	9	-
47	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
47	4.15	Pollutant release to public sewer	0	0	0	0	-
48	4.16	List 1 Dangerous Substances	0	0	0	0	-
48	4.17	<u>List 2 Dangerous Substances</u>	0	0	0	1	-
48	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	2	3	-
49	4.19	Pollution inventory substances	0	0	0	0	-
49	4.20	Pollution inventory waste transfers	0	0	0	0	-
49	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
50	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
51	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
53	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
55	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
55	5.5	Groundwater vulnerability- local information	None (within 0m)				
56	5.6	<u>Groundwater abstractions</u>	0	0	1	0	15
60	5.7	<u>Surface water abstractions</u>	0	0	0	0	1
60	5.8	Potable abstractions	0	0	0	0	0
61	5.9	<u>Source Protection Zones</u>	2	0	0	0	-
61	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
62	6.1	<u>Water Network (OS MasterMap)</u>	0	0	11	-	-



63	6.2	<u>Surface water features</u>	1	0	9	-	-
64	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
64	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
65	6.5	<u>WFD Groundwater bodies</u>	2	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
66	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
66	7.2	Historical Flood Events	0	0	0	-	-
66	7.3	Flood Defences	0	0	0	-	-
67	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
67	7.5	Flood Storage Areas	0	0	0	-	-
68	7.6	Flood Zone 2	None (within 50m)				
68	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
69	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
71	9.1	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
72	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
73	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
73	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
73	10.4	Special Protection Areas (SPA)	0	0	0	0	0
73	10.5	National Nature Reserves (NNR)	0	0	0	0	0
74	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
74	10.7	<u>Designated Ancient Woodland</u>	0	0	0	0	14
75	10.8	Biosphere Reserves	0	0	0	0	0
75	10.9	Forest Parks	0	0	0	0	0
75	10.10	Marine Conservation Zones	0	0	0	0	0
75	10.11	Green Belt	0	0	0	0	0
75	10.12	Proposed Ramsar sites	0	0	0	0	0



76	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
76	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
76	10.15	Nitrate Sensitive Areas	0	0	0	0	0
76	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
77	10.17	<u>SSSI Impact Risk Zones</u>	2	-	-	-	-
78	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
79	11.1	World Heritage Sites	0	0	0	-	-
80	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
80	11.3	National Parks	0	0	0	-	-
80	11.4	<u>Listed Buildings</u>	0	0	1	-	-
81	11.5	Conservation Areas	0	0	0	-	-
81	11.6	Scheduled Ancient Monuments	0	0	0	-	-
81	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
82	12.1	<u>Agricultural Land Classification</u>	Grade 3a (within 250m)				
83	12.2	Open Access Land	0	0	0	-	-
83	12.3	Tree Felling Licences	0	0	0	-	-
83	12.4	Environmental Stewardship Schemes	0	0	0	-	-
83	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
84	13.1	Priority Habitat Inventory	0	0	0	-	-
84	13.2	Habitat Networks	0	0	0	-	-
84	13.3	Open Mosaic Habitat	0	0	0	-	-
84	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
85	14.1	<u>10k Availability</u>	Identified (within 500m)				
86	14.2	<u>Artificial and made ground (10k)</u>	0	1	1	1	-
87	14.3	<u>Superficial geology (10k)</u>	1	0	0	0	-

88	14.4	Landslip (10k)	0	0	0	0	-
89	14.5	<u>Bedrock geology (10k)</u>	2	0	1	0	-
90	14.6	<u>Bedrock faults and other linear features (10k)</u>	1	0	1	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
91	15.1	<u>50k Availability</u>	Identified (within 500m)				
92	15.2	<u>Artificial and made ground (50k)</u>	1	0	0	1	-
93	15.3	<u>Artificial ground permeability (50k)</u>	1	0	-	-	-
94	15.4	<u>Superficial geology (50k)</u>	2	0	0	0	-
95	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
95	15.6	Landslip (50k)	0	0	0	0	-
95	15.7	Landslip permeability (50k)	None (within 50m)				
96	15.8	<u>Bedrock geology (50k)</u>	4	0	1	0	-
97	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
97	15.10	<u>Bedrock faults and other linear features (50k)</u>	2	0	1	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
98	16.1	<u>BGS Boreholes</u>	0	5	25	-	-
Page	Section	Natural ground subsidence					
101	17.1	<u>Shrink swell clays</u>	Very low (within 50m)				
102	17.2	<u>Running sands</u>	Very low (within 50m)				
104	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
105	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
106	17.5	<u>Landslides</u>	Very low (within 50m)				
107	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
109	18.1	Natural cavities	0	0	0	0	-
110	18.2	BritPits	0	0	0	0	-
110	18.3	<u>Surface ground workings</u>	29	6	37	-	-
113	18.4	Underground workings	0	0	0	0	0
113	18.5	Historical Mineral Planning Areas	0	0	0	0	-



113	18.6	Non-coal mining	0	0	0	0	0
113	18.7	Mining cavities	0	0	0	0	0
113	18.8	JPB mining areas	None (within 0m)				
114	18.9	<u>Coal mining</u>	Identified (within 0m)				
114	18.10	Brine areas	None (within 0m)				
114	18.11	Gypsum areas	None (within 0m)				
114	18.12	Tin mining	None (within 0m)				
114	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
115	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
116	20.1	<u>BGS Estimated Background Soil Chemistry</u>	11	2	-	-	-
117	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
117	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
118	21.1	Underground railways (London)	0	0	0	-	-
118	21.2	Underground railways (Non-London)	0	0	0	-	-
119	21.3	Railway tunnels	0	0	0	-	-
119	21.4	<u>Historical railway and tunnel features</u>	0	0	4	-	-
119	21.5	Royal Mail tunnels	0	0	0	-	-
120	21.6	Historical railways	0	0	0	-	-
120	21.7	Railways	0	0	0	-	-
120	21.8	Crossrail 1	0	0	0	0	-
120	21.9	Crossrail 2	0	0	0	0	-
120	21.10	HS2	0	0	0	0	-

Recent aerial photograph



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Capture Date: 10/04/2020

Site Area: 38.93ha



Recent site history - 2017 aerial photograph



Capture Date: 07/05/2017

Site Area: 38.93ha



Recent site history - 2009 aerial photograph



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Capture Date: 11/05/2009

Site Area: 38.93ha



Recent site history - 2003 aerial photograph



Capture Date: 04/08/2003

Site Area: 38.93ha



Recent site history - 2000 aerial photograph



Capture Date: 04/09/2000

Site Area: 38.93ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical military land

1.1 Historical industrial land uses

Records within 500m

16

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
A	94m S	Unspecified Tanks	1982 - 1992	966840



ID	Location	Land use	Dates present	Group ID
1	102m S	Telecomm Exchange	1982 - 1992	933845
C	173m S	Unspecified Tanks	1982 - 1992	875572
D	225m S	Railway Sidings	1960 - 1968	935833
D	230m S	Railway Sidings	1949	880775
4	246m SW	Unspecified Tanks	1949	814860
5	247m S	Unspecified Heap	1960 - 1968	958224
6	279m SW	Railway Sidings	1949	870067
7	318m SW	Railway Sidings	1960 - 1968	945208
8	318m S	Industrial Estate	1982	844626
9	356m S	Unspecified Commercial/Industrial	1949	796408
D	408m S	Railway Buildings	1960 - 1968	984437
D	423m S	Railway Building	1960 - 1968	913474
11	425m S	Unspecified Pit	1960 - 1982	914267
D	438m S	Unspecified Tanks	1992	814864
16	479m S	Unspecified Heap	1960 - 1982	900352

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

30

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
A	94m S	Tanks	1982 - 1991	125438
A	95m S	Tanks	1993 - 1995	128131
A	97m S	Tanks	1989	104984



ID	Location	Land use	Dates present	Group ID
B	160m S	Unspecified Tank	1982 - 1990	146089
B	160m S	Unspecified Tank	1974 - 1991	132233
B	161m S	Unspecified Tank	1993 - 1995	127145
C	170m S	Tanks	1982 - 1990	128028
C	170m S	Tanks	1993 - 1995	138886
C	171m S	Unspecified Tank	1974 - 1991	122911
C	180m S	Tanks	1982 - 1990	138225
C	185m S	Tanks	1991	126604
C	195m S	Tanks	1993 - 1995	127752
C	195m S	Tanks	1982 - 1991	144889
3	218m S	Tanks	1987	104983
E	248m S	Unspecified Tank	1974 - 1991	130673
E	249m S	Unspecified Tank	1993 - 1995	136940
E	263m S	Tanks	1989	140200
F	394m S	Tanks	1960	104982
F	400m S	Tanks	1960	104981
D	426m S	Tanks	1987 - 1989	138288
D	431m S	Tanks	1989 - 1990	148016
D	432m S	Tanks	1991	148576
D	432m S	Tanks	1993 - 1995	146317
12	436m SW	Unspecified Tank	1982 - 1999	147396
D	442m S	Tanks	1991	147597
D	450m S	Tanks	1991	128946
D	463m S	Unspecified Tank	1982	110678
D	463m S	Tanks	1993 - 1995	124731
D	464m S	Tanks	1991	142622
D	465m S	Tanks	1993 - 1995	136561

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m

12

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
10	375m S	Electricity Substation	1991 - 1995	84681
13	452m S	Electricity Substation	1974 - 1995	68827
14	469m SW	Electricity Substation	1982 - 1988	81255
15	476m SW	Electricity Substation	1982 - 1999	67486
D	491m S	Electricity Substation	1989	78303
D	492m S	Electricity Substation	1990	67055
D	492m S	Electricity Substation	1990	74971
D	492m S	Electricity Substation	1989	76207
D	498m S	Electricity Substation	1982 - 1987	66128
D	498m S	Electricity Substation	1993	67655
D	498m S	Electricity Substation	1995	75403
D	498m S	Electricity Substation	1994	83333

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.



1.5 Historical garages

Records within 500m

0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

1

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

Features are displayed on the Past land use map on **page 13**

ID	Location	Site Name	Date of Operation	Activities
2	190m S	ROF Wrexham	c.1938 - 1988	c. WW2: Produced cordite;; post WW2: Cordite production ceased in 1945 and the area was used as an industrial estate by the Welsh Development Agency to boost the local economy; Explosives Factory

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

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2.1 Historical industrial land uses

Records within 500m

28

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
A	94m S	Unspecified Tanks	1992	966840
A	94m S	Unspecified Tanks	1982	966840
B	102m S	Telecomm Exchange	1992	933845



ID	Location	Land Use	Date	Group ID
B	102m S	Telecomm Exchange	1982	933845
D	173m S	Unspecified Tanks	1992	875572
D	173m S	Unspecified Tanks	1982	875572
E	225m S	Railway Sidings	1960	935833
E	225m S	Railway Sidings	1968	935833
E	230m S	Railway Sidings	1949	880775
2	246m SW	Unspecified Tanks	1949	814860
F	247m S	Unspecified Heap	1960	958224
F	247m S	Unspecified Heap	1968	958224
3	279m SW	Railway Sidings	1949	870067
H	318m SW	Railway Sidings	1960	945208
H	318m SW	Railway Sidings	1968	945208
4	318m S	Industrial Estate	1982	844626
5	356m S	Unspecified Commercial/Industrial	1949	796408
E	408m S	Railway Buildings	1960	984437
E	408m S	Railway Buildings	1968	984437
E	423m S	Railway Building	1960	913474
E	423m S	Railway Building	1968	913474
K	425m S	Unspecified Pit	1982	914267
K	425m S	Unspecified Pit	1960	914267
K	425m S	Unspecified Pit	1968	914267
E	438m S	Unspecified Tanks	1992	814864
P	479m S	Unspecified Heap	1982	900352
P	479m S	Unspecified Heap	1960	900352
P	479m S	Unspecified Heap	1968	900352

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

92

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
A	94m S	Tanks	1982	125438
A	94m S	Tanks	1987	125438
A	94m S	Tanks	1989	125438
A	94m S	Tanks	1990	125438
A	94m S	Tanks	1990	125438
A	95m S	Tanks	1991	125438
A	95m S	Tanks	1993	128131
A	95m S	Tanks	1995	128131
A	95m S	Tanks	1994	128131
A	97m S	Tanks	1989	104984
C	160m S	Unspecified Tank	1982	146089
C	160m S	Unspecified Tank	1987	146089
C	160m S	Unspecified Tank	1989	146089
C	160m S	Unspecified Tank	1989	146089
C	160m S	Unspecified Tank	1990	146089
C	160m S	Unspecified Tank	1990	146089
C	160m S	Unspecified Tank	1991	132233
C	160m S	Unspecified Tank	1974	132233
C	161m S	Unspecified Tank	1993	127145
C	161m S	Unspecified Tank	1995	127145
C	161m S	Unspecified Tank	1994	127145
D	170m S	Tanks	1982	128028
D	170m S	Tanks	1987	128028



ID	Location	Land Use	Date	Group ID
D	170m S	Tanks	1989	128028
D	170m S	Tanks	1989	128028
D	170m S	Tanks	1990	128028
D	170m S	Tanks	1990	128028
D	170m S	Tanks	1993	138886
D	170m S	Tanks	1995	138886
D	170m S	Tanks	1994	138886
D	171m S	Unspecified Tank	1991	122911
D	171m S	Unspecified Tank	1974	122911
D	180m S	Tanks	1982	138225
D	180m S	Tanks	1987	138225
D	180m S	Tanks	1989	138225
D	180m S	Tanks	1989	138225
D	180m S	Tanks	1990	138225
D	180m S	Tanks	1990	138225
D	185m S	Tanks	1991	126604
D	195m S	Tanks	1993	127752
D	195m S	Tanks	1995	127752
D	195m S	Tanks	1994	127752
D	195m S	Tanks	1982	144889
D	195m S	Tanks	1987	144889
D	195m S	Tanks	1989	144889
D	195m S	Tanks	1989	144889
D	195m S	Tanks	1990	144889
D	195m S	Tanks	1990	144889
D	196m S	Tanks	1991	144889
1	218m S	Tanks	1987	104983
G	248m S	Unspecified Tank	1982	130673

ID	Location	Land Use	Date	Group ID
G	248m S	Unspecified Tank	1987	130673
G	248m S	Unspecified Tank	1989	130673
G	248m S	Unspecified Tank	1989	130673
G	248m S	Unspecified Tank	1990	130673
G	248m S	Unspecified Tank	1990	130673
G	249m S	Unspecified Tank	1991	130673
G	249m S	Unspecified Tank	1974	130673
G	249m S	Unspecified Tank	1993	136940
G	249m S	Unspecified Tank	1995	136940
G	249m S	Unspecified Tank	1994	136940
G	263m S	Tanks	1989	140200
G	263m S	Tanks	1989	140200
J	394m S	Tanks	1960	104982
J	400m S	Tanks	1960	104981
E	426m S	Tanks	1987	138288
E	426m S	Tanks	1989	138288
E	431m S	Tanks	1989	148016
E	431m S	Tanks	1990	148016
E	431m S	Tanks	1990	148016
E	432m S	Tanks	1991	148576
E	432m S	Tanks	1993	146317
E	432m S	Tanks	1995	146317
E	432m S	Tanks	1994	146317
L	436m SW	Unspecified Tank	1994	147396
L	436m SW	Unspecified Tank	1999	147396
L	436m SW	Unspecified Tank	1995	147396
L	436m SW	Unspecified Tank	1995	147396
L	437m SW	Unspecified Tank	1982	147396



ID	Location	Land Use	Date	Group ID
L	437m SW	Unspecified Tank	1988	147396
L	437m SW	Unspecified Tank	1990	147396
L	437m SW	Unspecified Tank	1990	147396
E	442m S	Tanks	1991	147597
E	450m S	Tanks	1991	128946
E	463m S	Unspecified Tank	1982	110678
E	463m S	Tanks	1993	124731
E	463m S	Tanks	1995	124731
E	463m S	Tanks	1994	124731
E	464m S	Tanks	1991	142622
E	465m S	Tanks	1993	136561
E	465m S	Tanks	1995	136561
E	465m S	Tanks	1994	136561

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

33

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
I	375m S	Electricity Substation	1991	84681
I	376m S	Electricity Substation	1993	84681
I	376m S	Electricity Substation	1995	84681
I	376m S	Electricity Substation	1994	84681
M	452m S	Electricity Substation	1993	68827
M	452m S	Electricity Substation	1995	68827
M	452m S	Electricity Substation	1994	68827



ID	Location	Land Use	Date	Group ID
M	452m S	Electricity Substation	1991	68827
M	452m S	Electricity Substation	1974	68827
M	453m S	Electricity Substation	1982	68827
M	453m S	Electricity Substation	1987	68827
M	453m S	Electricity Substation	1989	68827
M	453m S	Electricity Substation	1989	68827
M	453m S	Electricity Substation	1990	68827
N	469m SW	Electricity Substation	1982	81255
N	469m SW	Electricity Substation	1988	81255
O	476m SW	Electricity Substation	1994	67486
O	476m SW	Electricity Substation	1999	67486
O	476m SW	Electricity Substation	1995	67486
O	476m SW	Electricity Substation	1995	67486
O	478m SW	Electricity Substation	1982	67486
O	478m SW	Electricity Substation	1988	67486
O	478m SW	Electricity Substation	1990	67486
O	478m SW	Electricity Substation	1990	67486
E	491m S	Electricity Substation	1989	78303
E	492m S	Electricity Substation	1989	76207
E	492m S	Electricity Substation	1990	74971
E	492m S	Electricity Substation	1990	67055
E	498m S	Electricity Substation	1982	66128
E	498m S	Electricity Substation	1987	66128
E	498m S	Electricity Substation	1993	67655
E	498m S	Electricity Substation	1995	75403
E	498m S	Electricity Substation	1994	83333

This data is sourced from Ordnance Survey / Groundsure.



2.4 Historical petrol stations

Records within 500m**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m**0**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Licensed waste sites
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m

0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m

0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m

17

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 26**

ID	Location	Details		
A	127m S	Site Name: Bryn Lane Composting Facility Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Composting Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS023 EPR reference: ZP3795ER/V002 Operator: F C C Recycling (U K) Limited Waste Management licence No: 100079 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: - Modified: 22/08/2012 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified

ID	Location	Details		
A	128m S	Site Name: Bryn Lane Waste Recycling And Composting Facility Site Address: Land/ Premises At, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS023 EPR reference: EA/EPR/ZP3795ER/V004 Operator: Waste Recycling Ltd Waste Management licence No: 100079 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: - Modified: 05/05/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	128m S	Site Name: - Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9UT Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ZP3795ER EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 0 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: 27/11/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	128m S	Site Name: Bryn Lane Waste Recycling And Composting Facility Site Address: Land/ Premises At, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS023 EPR reference: ZP3795ER/V002 Operator: Waste Recycling Group Ltd Waste Management licence No: 100079 Annual Tonnage: 0	Issue Date: 27/11/2007 Effective Date: - Modified: 16/04/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	128m S	Site Name: Bryn Lane Composting Facility Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS023 EPR reference: ZP3795ER/V002 Operator: F C C Recycling (U K) Limited Waste Management licence No: 100079 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: - Modified: 22/08/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
A	128m S	Site Name: Bryn Lane Composting Facility Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS023 EPR reference: EA/EPR/ZP3795ER/V002 Operator: F C C Recycling (U K) Limited Waste Management licence No: 100079 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: - Modified: 22/08/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	128m S	Site Name: - Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ZP3795ER EPR reference: - Operator: - Waste Management licence No: 100079 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: 27/11/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	128m S	Site Name: - Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: ZP3795ER EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 100079 Annual Tonnage: -	Issue Date: 27/11/2007 Effective Date: 27/11/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	128m S	Site Name: - Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Clwyd, Wrexham, Wrexham, LL13 9UT Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ZP3795ER EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 100079 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: 27/11/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
A	128m S	Site Name: - Site Address: Bryn Lane Composting Facility, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: ZP3795ER EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 100079 Annual Tonnage: 81444	Issue Date: 27/11/2007 Effective Date: 27/11/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
D	367m W	Site Name: Clays Site Site Address: Clays Site, Bryn Estyn Road, Llan -y- Pwll, Wrexham, Clwyd, LL13 9UB Correspondence Address: -	Type of Site: Use of waste in construction 100,000 tps Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: LEW037 EPR reference: XP3691EG/A001 Operator: Clays Farm Golf Centre Limited Waste Management licence No: 102738 Annual Tonnage: 0	Issue Date: 05/10/2011 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued
D	367m W	Site Name: Clays Site Site Address: Clays Site, Bryn Estyn Road, Llan -y- Pwll, Wrexham, Clwyd, LL13 9UB Correspondence Address: -	Type of Site: Use of waste in construction 100,000 tps Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LEW037 EPR reference: EA/EPR/XP3691EG/A001 Operator: Clays Farm Golf Centre Limited Waste Management licence No: 102738 Annual Tonnage: 99999	Issue Date: 05/10/2011 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
D	367m W	Site Name: - Site Address: Clays Site, Llan -y- Pwll, Wrexham, Wrexham, LL13 9UB Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: XP3691EG EPR reference: - Operator: Clays Farm Golf Centre Limited Waste Management licence No: 0 Annual Tonnage: 99999	Issue Date: 05/10/2011 Effective Date: 05/10/2011 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
D	367m W	Site Name: - Site Address: Clays Site, Llan -y- Pwll, Wrexham, Clwyd, LL13 9UB Correspondence Address: -	Type of Site: Use of waste in construction 100,000 tps Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: XP3691EG EPR reference: - Operator: - Waste Management licence No: 102738 Annual Tonnage: 99999	Issue Date: 05/01/2018 Effective Date: 05/01/2018 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
D	367m W	Site Name: - Site Address: Clays Site, Bryn Estyn Rd, Llan -y- Pwll, Wrexham, Clwyd, LL13 9UB Correspondence Address: -	Type of Site: Deposit of waste to land as a recovery operation Size: - Environmental Permitting Regulations (Waste) Licence Number: XP3691EG EPR reference: - Operator: William Lewis Waste Management licence No: 102738 Annual Tonnage: -	Issue Date: 21/02/2019 Effective Date: 21/02/2019 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
D	367m W	Site Name: - Site Address: Clays Site, Llan -y- Pwll, Clwyd, Wrexham, Wrexham, LL13 9UB Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: XP3691EG EPR reference: - Operator: William Lewis Waste Management licence No: 102738 Annual Tonnage: 99999	Issue Date: 05/01/2018 Effective Date: 05/01/2018 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
D	367m W	Site Name: - Site Address: Clays Site, Llan -y- Pwll, Wrexham, Clwyd, LL13 9UB Correspondence Address: -	Type of Site: Use of waste in construction 100,000 tps Size: - Environmental Permitting Regulations (Waste) Licence Number: XP3691EG EPR reference: - Operator: William Lewis Waste Management licence No: 102738 Annual Tonnage: 99999	Issue Date: 05/01/2018 Effective Date: 05/01/2018 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective

This data is sourced from the Environment Agency and Natural Resources Wales.



3.7 Waste exemptions

Records within 500m

11

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 26**

ID	Location	Site	Reference	Category	Sub-Category	Description
B	244m S	DRAGON HYDRAULICS, Unit 3 Abbey Road North, Wrexham Industrial Estate, WREXHAM, LL13 9RX	WEX125151	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	250m S	-	WEX264851	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	250m S	Rodens Hall, Isycoed, Wrexham, Wrecsam, LL13 9RX	NRW-WME001936	Using waste exemption	Waste Exemption - Agricultural	Use of waste derived biodiesel as fuel
B	250m S	Rodens Hall, Isycoed, Wrexham, Wrecsam, LL13 9RX	NRW-WME001936	Storing waste exemption	Waste Exemption - Non-Agricultural	Storage of sludge
1	297m S	Trans Continental A C UK Ltd, Ash Road North, Wrexham Industrial Estate, Wrexham, Wrecsam, LL13 9UF	NRW-WME046393	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
C	358m S	Allied Fire Alarms & Escapes Co Ltd, Allied House Bryn Lane, Wrexham Industrial Estate, WREXHAM, Wrexham, LL13 9UT	NRW-WME046506	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	358m S	Allied Fire Alarms & Escapes Co Ltd, Allied House Bryn Lane, Wrexham Industrial Estate, WREXHAM, Wrexham, LL13 9UT	NRW-WME046506	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	394m S	AST Plastic Containers UK LLP, Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, Wrecsam, LL13 9RF	NRW-WME061390	Storing waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Storage of waste in a secure place

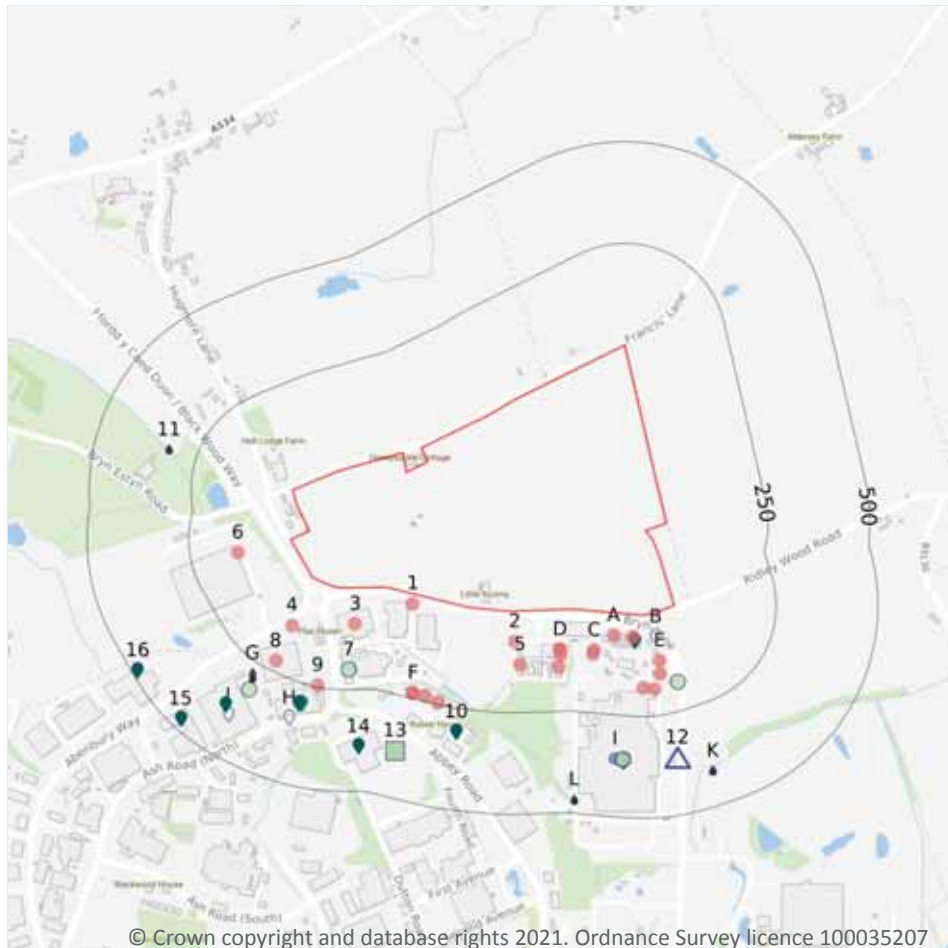


ID	Location	Site	Reference	Category	Sub-Category	Description
E	394m S	AST Plastic Containers UK LLP, Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, Wreccsam, LL13 9RF	NRW- WME061390	Treating waste exemption	Waste Exemption - Agricultural and Non- Agricultural	Cleaning, washing, spraying or coating relevant waste
E	394m S	AST Plastic Containers UK LLP, Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, Wreccsam, LL13 9RF	NRW- WME061390	Treating waste exemption	Waste Exemption - Agricultural and Non- Agricultural	Preparatory treatments (baling, sorting, shredding etc)
2	443m NW	DCWW, Rodens Hall Farm, Bowling Bank, Wrexham, Wreccsam, LL13 9RS	NRW- WME054232	Storing waste exemption	Not on a farm	Storage of sludge

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- △ Current or recent petrol stations
- Historical licensed industrial activities
- ◇ Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

24

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 34**

ID	Location	Company	Address	Activity	Category
1	23m S	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
A	56m S	Main Man Supplies	Unit 1 Ridley Wood Industrial Complex, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT	Special Purpose Machinery and Equipment	Industrial Products

ID	Location	Company	Address	Activity	Category
A	56m S	Electromec Ltd	Unit 5 Ridley Wood Industrial Complex, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT	Electrical and Electronic Engineers	Engineering Services
2	75m S	Bryn Business Centre	Clwyd, LL13	Business Parks and Industrial Estates	Industrial Features
3	89m S	Wockhardt UK Ltd	ASH ROAD NORTH, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UF	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
C	96m S	Tank	Clwyd, LL13	Tanks (Generic)	Industrial Features
D	98m S	Aspull Engineering	Kellogs Site Bryn Business Centre, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT	Industrial Engineers	Engineering Services
D	98m S	Air Covers	Unit E, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT	Aviation Engineers	Engineering Services
C	105m S	Tank	Clwyd, LL13	Tanks (Generic)	Industrial Features
D	112m S	Wellpecs Ltd	Unit H1 Bryn Business Centre, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT	Electrical and Electronic Engineers	Engineering Services
E	117m S	Grafters Ltd	Unit 6, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT	Recycling, Reclamation and Disposal	Recycling Services
4	128m SW	Gas Governor	Clwyd, LL13	Gas Features	Infrastructure and Facilities
5	131m S	Dacta Ltd	Ridley Wood Industrial Complex, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT	Educational Equipment and Supplies	Industrial Products
6	134m W	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
D	140m S	A M Industrial Supplies	Unit J2 Bryn Business Centre, Bryn Lane, Wrexham, Clwyd, LL13 9UT	General Purpose Machinery	Industrial Products
E	149m S	Telephone Exchange	Clwyd, LL13	Telecommunications Features	Infrastructure and Facilities
E	179m S	Chimney	Clwyd, LL13	Chimneys	Industrial Features
E	183m S	Chimney	Clwyd, LL13	Chimneys	Industrial Features



ID	Location	Company	Address	Activity	Category
8	225m SW	J C B Drivetrain Systems	Unit 1, Ash Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JT	Engines	Industrial Products
F	236m S	Relabelled	Abbey Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RX	Office and Shop Equipment	Industrial Products
F	236m S	Kids Direct Ltd	Abbey Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RX	Published Goods	Industrial Products
F	237m S	A & S Jones	Abbey Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RX	General Construction Supplies	Industrial Products
9	244m S	Tank	Clwyd, LL13	Tanks (Generic)	Industrial Features
F	245m S	Jami Q's	Abbey Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RX	Textiles, Fabrics, Silk and Machinery	Industrial Products

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1
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Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 34**

ID	Location	Company	Address	LPG	Status
12	359m S	CERTAS ENERGY	Bryn Lane, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9UT	No	Non-Retail

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0
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High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m**0**

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m**0**

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m**0**

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m**0**

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

5

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

Features are displayed on the Current industrial land use map on **page 34**

ID	Location	Details	
I	357m S	Operator: Owens Corning Fiberglas (gb) Ltd Address: Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JU Process: Other Mineral Fibres Permit Number: AG1425	Original Permit Number: IPCAIRAPP Date Approved: 8-4-1993 Effective Date: 8-4-1993 Status: Superseded By Variation
I	357m S	Operator: Owens Corning Fiberglas (gb) Ltd Address: Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JU Process: Manufacture And Use Of Organic Chemicals Permit Number: AK5407	Original Permit Number: IPCAPP Date Approved: 18-2-1994 Effective Date: 28-2-1994 Status: Superseded By Variation
I	357m S	Operator: Owens Corning Fiberglas (gb) Ltd Address: Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JU Process: Other Mineral Fibres Permit Number: BC5539	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
I	357m S	Operator: Owens Corning Fiberglas (gb) Ltd Address: Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JU Process: Manufacture And Use Of Organic Chemicals Permit Number: BC6713	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
I	357m S	Operator: Owens Corning Fiberglas (gb) Ltd Address: Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9JU Process: Other Mineral Fibres Permit Number: BG0342	Original Permit Number: IPCMINVAR Date Approved: 21-9-2001 Effective Date: 15-10-2001 Status: Revoked

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

34

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 34**



ID	Location	Details	
B	58m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: BV8016ID Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 09/11/2005 Effective Date: 09/11/2005 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
B	58m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: COMBUSTION; ANY FUEL =>50MW Permit Number: BV8016ID Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 09/11/2005 Effective Date: 09/11/2005 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
B	58m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY BIOLOGICAL TREATMENT Permit Number: BV8016ID Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 09/11/2005 Effective Date: 09/11/2005 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
B	58m S	Operator: KELLOGG CO (GB) LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: OTHER WASTE DISPOSAL; ON SITE EFFLUENT TREATMENT PLANT DISCHARGING =>300 M CUBED PER DAY Permit Number: BV8016ID Original Permit Number: BV8016ID	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/04/2005 Status: DETERMINATION
H	341m S	Operator: IPSEN BIOPHARM LTD Installation Name: WREXHAM PHARMACEUTICAL WORKS Process: PRODUCING PLANT HEALTH PRODUCTS OR BIOCIDES Permit Number: SP3030LZ Original Permit Number: JP3038HV	EPR Reference: - Issue Date: 19/12/2012 Effective Date: 19/12/2012 Last date noted as effective: 26/10/2020 Status: EFFECTIVE
H	341m S	Operator: IPSEN BIOPHARM LTD Installation Name: WREXHAM PHARMACEUTICAL WORKS Process: - Permit Number: SP3030LZ Original Permit Number: JP3038HV	EPR Reference: - Issue Date: 19/12/2012 Effective Date: 19/12/2012 Last date noted as effective: 01/12/2016 Status: EFFECTIVE
H	341m S	Operator: IPSEN BIOPHARM LTD Installation Name: WREXHAM PHARMACEUTICAL WORKS Process: PRODUCING PHARMACEUTICAL PRODUCTS Permit Number: SP3030LZ Original Permit Number: JP3038HV	EPR Reference: - Issue Date: 13/02/2019 Effective Date: 13/02/2019 Last date noted as effective: 01/07/2021 Status: EFFECTIVE



ID	Location	Details	
H	341m S	Operator: IPSEN BIOPHARM LTD Installation Name: WREXHAM PHARMACEUTICAL EPR/SP3030LZ Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: JP3038HV Original Permit Number: SP3030LZ	EPR Reference: - Issue Date: 19/12/2012 Effective Date: 19/12/2012 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
H	341m S	Operator: IPSEN BIOPHARM LTD Installation Name: WREXHAM PHARMACEUTICAL WORKS Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: SP3030LZ Original Permit Number: SP3030LZ	EPR Reference: - Issue Date: 04/12/2006 Effective Date: 04/12/2006 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: GP3031ZW Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: COMBUSTION; ANY FUEL =>50MW Permit Number: GP3031ZW Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Permit Number: GP3031ZW Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: KP3135LW Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 05/05/2006 Effective Date: 05/05/2006 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: COMBUSTION; ANY FUEL =>50MW Permit Number: KP3135LW Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 05/05/2006 Effective Date: 05/05/2006 Last date noted as effective: 17/11/2015 Status: SUPERCEDED



ID	Location	Details	
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY BIOLOGICAL TREATMENT Permit Number: KP3135LW Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 05/05/2006 Effective Date: 05/05/2006 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: VP3832KF Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 23/03/2010 Effective Date: 23/03/2010 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: COMBUSTION; ANY FUEL =>50MW Permit Number: VP3832KF Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 23/03/2010 Effective Date: 23/03/2010 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY BIOLOGICAL TREATMENT Permit Number: VP3832KF Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 23/03/2010 Effective Date: 23/03/2010 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC VEGETABLE RAW MATERIALS FOR FOOD >300T/D Permit Number: VP3935CF Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 19/04/2012 Effective Date: 19/04/2012 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: COMBUSTION; ANY FUEL =>50MW Permit Number: VP3935CF Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 19/04/2012 Effective Date: 19/04/2012 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY BIOLOGICAL TREATMENT Permit Number: VP3935CF Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 19/04/2012 Effective Date: 19/04/2012 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW... Permit Number: BV8016ID Original Permit Number: GP3031ZW	EPR Reference: - Issue Date: 19/10/2017 Effective Date: 19/10/2017 Last date noted as effective: 01/04/2018 Status: EFFECTIVE



ID	Location	Details	
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW... Permit Number: BV8016ID Original Permit Number: GP3031ZW	EPR Reference: - Issue Date: 19/10/2017 Effective Date: 19/10/2017 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW... Permit Number: BV8016ID Original Permit Number: GP3031ZW	EPR Reference: - Issue Date: 19/10/2017 Effective Date: 19/10/2017 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: WREXHAM, BREAKFAST CEREALS Process: CREATED BY IED - DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Permit Number: GP3031ZW Original Permit Number: BV8016ID	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 01/07/2013 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: DISPOSAL OF NON-HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 50 TONNES PER DAY (OR 100 TONNES PER DAY IF THE ONLY WASTE TREATMENT ACTIVITY IS ANAEROBIC DIGESTION) INVOLVING ONE OR MORE OF THE FOLLOWING ACTIVITIES, AND EXCLUDING ACTIVITIES COVERED BY COUNCIL DIRECTIVE 91/271/EEC CONCERNING URBAN WASTE-WATER TREATMENT(4)?BIOLOGICAL TREATMENT Permit Number: BV8016ID Original Permit Number: GP3031ZW	EPR Reference: - Issue Date: 19/10/2017 Effective Date: 19/10/2017 Last date noted as effective: 01/07/2021 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: - Permit Number: BV8016ID Original Permit Number: -	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/04/2017 Status: DULY MADE

ID	Location	Details	
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW MATERIALS, WHETHER PREVIOUSLY PROCESSED OR UNPROCESSED, INTENDED FOR THE PRODUCTION OF FOOD OR FEED (WHERE THE WEIGHT OF THE FINISHED PRODUCT EXCLUDES PACKAGING)? ONLY VEGETABLE RAW MATERIALS WITH A FINISHED PRODUCT PRODUCTION CAPACITY GREATER THAN 300 TONNES PER DAY OR 600 TONNES PER DAY WHERE THE INSTALLATION OPERATES FOR A PERIOD OF NO MORE THAN 90 CONSECUTIVE DAYS IN ANY YEAR Permit Number: BV8016ID Original Permit Number: GP3031ZW	EPR Reference: - Issue Date: 19/10/2017 Effective Date: 19/10/2017 Last date noted as effective: 01/07/2021 Status: EFFECTIVE
I	365m S	Operator: KELLOGG COMPANY OF GREAT BRITAIN LTD Installation Name: KELLOGGS EPR/BV8016ID Process: BURNING ANY FUEL IN AN APPLIANCE WITH A RATED THERMAL INPUT OF 50 OR MORE MEGAWATTS Permit Number: BV8016ID Original Permit Number: GP3031ZW	EPR Reference: - Issue Date: 19/10/2017 Effective Date: 19/10/2017 Last date noted as effective: 01/07/2021 Status: EFFECTIVE
J	397m SW	Operator: WREXHAM WIRE LIMITED Installation Name: WREXHAM WIRE LIMITED Process: UNLESS FALLING WITHIN PART A2 OF THIS SECTION, SURFACE TREATING METALS AND PLAST... Permit Number: AB3190FW Original Permit Number: -	EPR Reference: - Issue Date: 06/05/2016 Effective Date: 06/05/2016 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
J	397m SW	Operator: WREXHAM WIRE LIMITED Installation Name: WREXHAM WIRE LIMITED Process: UNLESS FALLING WITHIN PART A2 OF THIS SECTION, SURFACE TREATING METALS AND PLAST... Permit Number: AB3190FW Original Permit Number: -	EPR Reference: - Issue Date: 06/05/2016 Effective Date: 06/05/2016 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
J	397m SW	Operator: WREXHAM WIRE LIMITED Installation Name: WREXHAM WIRE LIMITED Process: - Permit Number: AB3190FW Original Permit Number: -	EPR Reference: - Issue Date: 06/05/2016 Effective Date: 06/05/2016 Last date noted as effective: 01/04/2017 Status: ISSUED



ID	Location	Details	
J	397m SW	Operator: WREXHAM WIRE LIMITED Installation Name: WREXHAM WIRE LIMITED Process: DISPOSAL OF NON-HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 50 TONNES PER DAY (OR 100 TONNES PER DAY IF THE ONLY WASTE TREATMENT ACTIVITY IS ANAEROBIC DIGESTION) INVOLVING ONE OR MORE OF THE FOLLOWING ACTIVITIES, AND EXCLUDING ACTIVITIES COVERED BY COUNCIL DIRECTIVE 91/271/EEC CONCERNING URBAN WASTE-WATER TREATMENT(4)?PHYSICO-CHEMICAL TREATMENT Permit Number: AB3190FW Original Permit Number: -	EPR Reference: - Issue Date: 06/05/2016 Effective Date: 06/05/2016 Last date noted as effective: 01/07/2021 Status: EFFECTIVE
J	397m SW	Operator: WREXHAM WIRE LIMITED Installation Name: WREXHAM WIRE LIMITED Process: UNLESS FALLING WITHIN PART A(2) OF THIS SECTION, SURFACE TREATING METALS AND PLASTIC MATERIALS USING AN ELECTROLYTIC OR CHEMICAL PROCESS WHERE THE AGGREGATED VOLUME OF THE TREATMENT VATS IS MORE THAN 30M3 Permit Number: AB3190FW Original Permit Number: -	EPR Reference: - Issue Date: 06/05/2016 Effective Date: 06/05/2016 Last date noted as effective: 01/07/2021 Status: EFFECTIVE

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	10
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Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 34**

ID	Location	Address	Details	
A	66m S	Orchid Laundry & Dry Cleaning Ltd, Unit 6, Ridley Wood Industrial Complex, Bryn Lane, Wrexham Industrial Estate, Wrexham, LL13 9UT	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
H	296m S	Coveris, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9UF	Process: Coating Processes Status: Current Permit Permit Type: Part B/A2	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.

ID	Location	Address	Details	
H	298m S	Intelicoat Technologies, Wrexham Industrial Estate, Wrexham, LL13 9UF	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
H	300m S	Exopack Advanced Coatings, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9UF	Process: Coating Processes Status: Historical Permit Permit Type: Part A2	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
10	307m S	Petcor Limited, Unit A4 and A6 Abbey Road, Redwither Buisness Park, Wrexham, LL13 9XG	Process: Animal Feed Compound Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
I	359m S	Kellogg Company of Great Britain Ltd, Bryn Lane, Wrexham Industrial Estate, Wrexham, LL13 9UT	Process: Combustion & Incineration Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
J	379m SW	JCB Transmissions, Unit 4, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UF	Process: Coating Processes Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
14	390m S	Hoya Lens UK Ltd, Fourth Road, Wrexham Industrial Estate, Wrexham, LL13 9UA	Process: Surface Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
15	476m SW	Caparo Wire Ltd, PO Box 87, Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9JT	Process: Surface Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: Enforcement Notified Date of enforcement: 30/03/2006 Comment: Wood processing
16	486m SW	Waste Oil Burners, Unit 3 Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9US	Process: Timber Manufacture Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.

This data is sourced from Local Authority records.



4.12 Radioactive Substance Authorisations

Records within 500m

0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m

9

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 34**

ID	Location	Address	Details	
G	278m SW	JCB TRANSMISSIONS LTD WREXHAM IND E, JCB TRANSMISSIONS LTD WREXHAM IN, WREXHAM IND ESTATE WREXHAM, WREXHAM	Effluent Type: UNSPECIFIED Permit Number: CM0097602 Permit Version: 1 Receiving Water: UN-NAMED TRIB. OF DEE	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/07/1984 Effective Date: 25/07/1984 Revocation Date: 14/07/1994
G	287m SW	JCB TRANSMISSIONS LTD WREXHAM IND E, JCB TRANSMISSIONS LTD WREXHAM IN, WREXHAM IND ESTATE WREXHAM, WREXHAM	Effluent Type: UNSPECIFIED Permit Number: CM0097601 Permit Version: 1 Receiving Water: UN-NAMED TRIB. OF DEE	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/07/1984 Effective Date: 25/07/1984 Revocation Date: 09/03/1993
11	320m W	BRYN VILLA, HUGMORE LANE, LLANYPWLL, WREXHAM, WALES, LL13 9YE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CG0447601 Permit Version: 1 Receiving Water: UNNAMED WATERCOURSE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY Issue date: 01/09/2006 Effective Date: 01/12/2006 Revocation Date: -
K	414m S	BRYN ROAD WREXHAM IND EST, WREXHAM IND EST, WREXHAM IN	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0083601 Permit Version: 1 Receiving Water: UNNAMED TRIB OF RIVER DEE	Status: REVOKED - UNSPECIFIED Issue date: 08/02/1978 Effective Date: 08/02/1978 Revocation Date: 29/09/1985
K	414m S	BRYN ROAD WREXHAM IND EST, WREXHAM IND EST, WREXHAM IN	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0083601 Permit Version: 3 Receiving Water: UNNAMED TRIB OF RIVER DEE	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 06/07/1994 Effective Date: 06/07/1994 Revocation Date: 09/11/2005



ID	Location	Address	Details	
K	414m S	BRYN ROAD WREXHAM IND EST, WREXHAM IND EST, WREXHAM IN	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0083601 Permit Version: 2 Receiving Water: UNNAMED TRIB OF RIVER DEE	Status: REVOKED - UNSPECIFIED Issue date: 30/09/1985 Effective Date: 30/09/1985 Revocation Date: 05/07/1994
L	465m S	BRYN ROAD WREXHAM IND EST, WREXHAM IND EST, WREXHAM IN	Effluent Type: UNSPECIFIED Permit Number: CM0097401 Permit Version: 1 Receiving Water: UN-NAMED TRIB. OF DEE	Status: REVOKED - UNSPECIFIED Issue date: 16/05/1984 Effective Date: 16/05/1984 Revocation Date: 29/09/1985
L	465m S	BRYN ROAD WREXHAM IND EST, WREXHAM IND EST, WREXHAM IN	Effluent Type: UNSPECIFIED Permit Number: CM0097401 Permit Version: 2 Receiving Water: UN-NAMED TRIB. OF DEE	Status: REVOKED - UNSPECIFIED Issue date: 16/05/1984 Effective Date: 30/09/1985 Revocation Date: 05/07/1994
L	465m S	BRYN ROAD WREXHAM IND EST, WREXHAM IND EST, WREXHAM IN	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0097401 Permit Version: 3 Receiving Water: UN-NAMED TRIB. OF DEE	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 06/07/1994 Effective Date: 06/07/1994 Revocation Date: 09/11/2005

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.16 List 1 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m

1

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on **page 34**

ID	Location	Name	Status	Receiving Water	Authorised Substances
13	385m S	Hoya Lens Uk Ltd (new Factory) Abbey Road, Wrexham Ind Est	Not Active	-	Chromium, Copper, Lead, Nickel, Zinc

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m

5

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 34**

ID	Location	Details	
E	179m S	Incident Date: 30/04/2015 Incident Identification: 1333634 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
7	201m S	Incident Date: 19/12/2013 Incident Identification: 1184930 Pollutant: Inorganic Chemicals/Products Pollutant Description: Other Inorganic Chemical or Product	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	317m SW	Incident Date: 25/07/2003 Incident Identification: 176604 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
I	358m S	Incident Date: 08/01/2014 Incident Identification: 1191799 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
I	358m S	Incident Date: 07/02/2014 Incident Identification: 1202822 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	0
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The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0
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The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

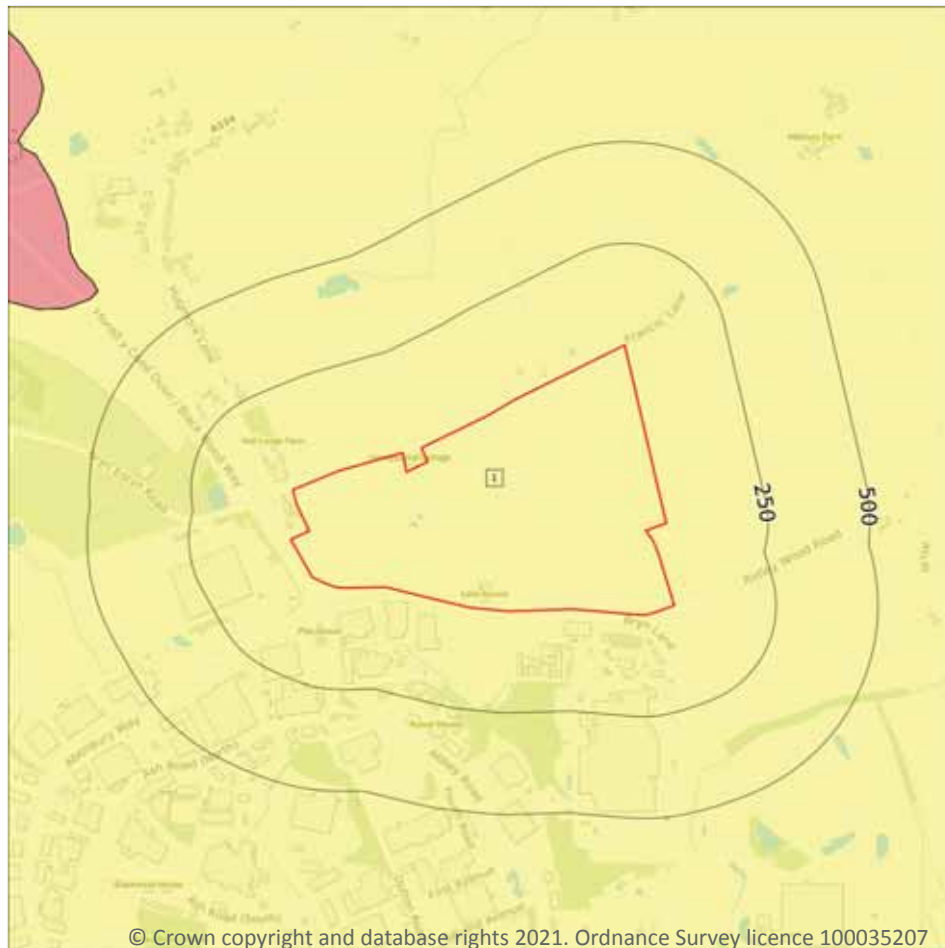
4.21 Pollution inventory radioactive waste

Records within 500m	0
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The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

1

Aquifer status of groundwater held within superficial geology.

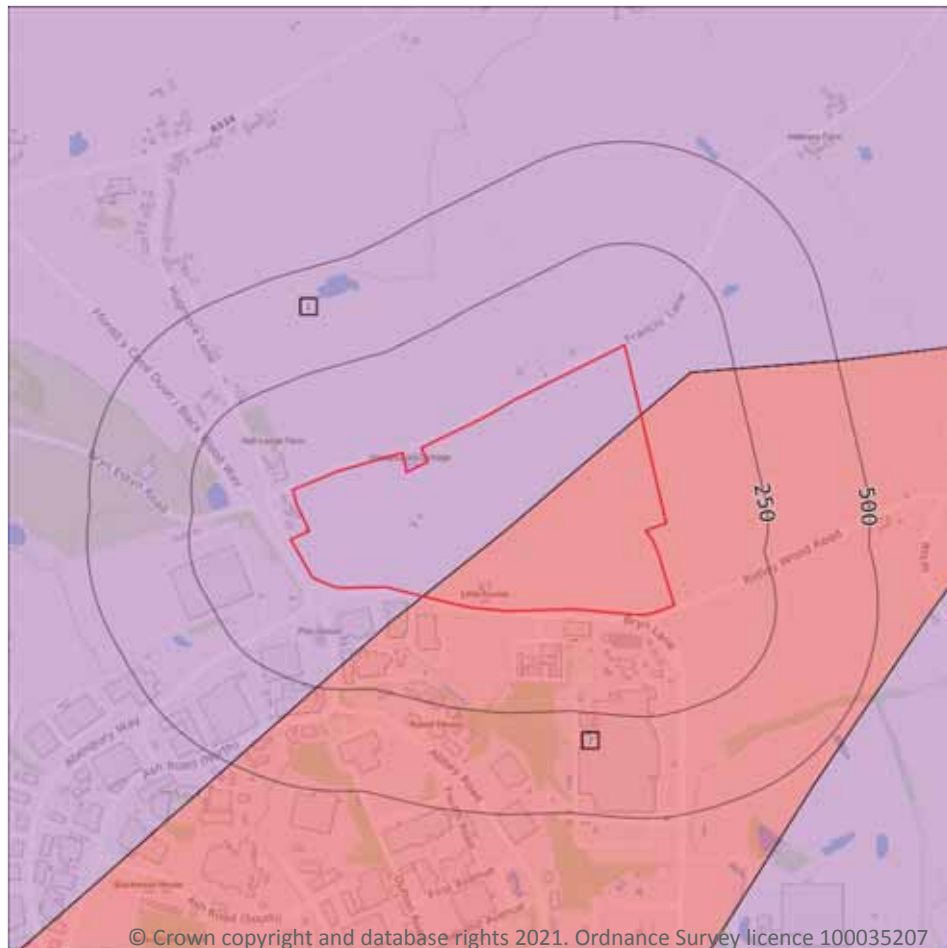
Features are displayed on the Hydrogeology map on **page 50**

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 51**

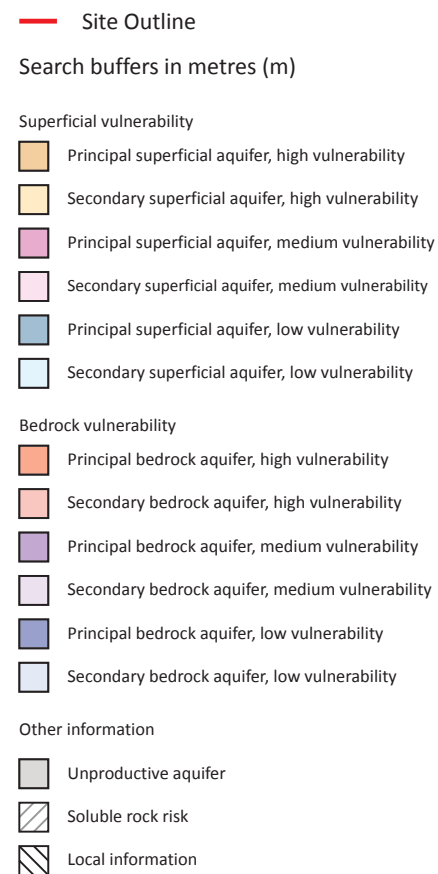
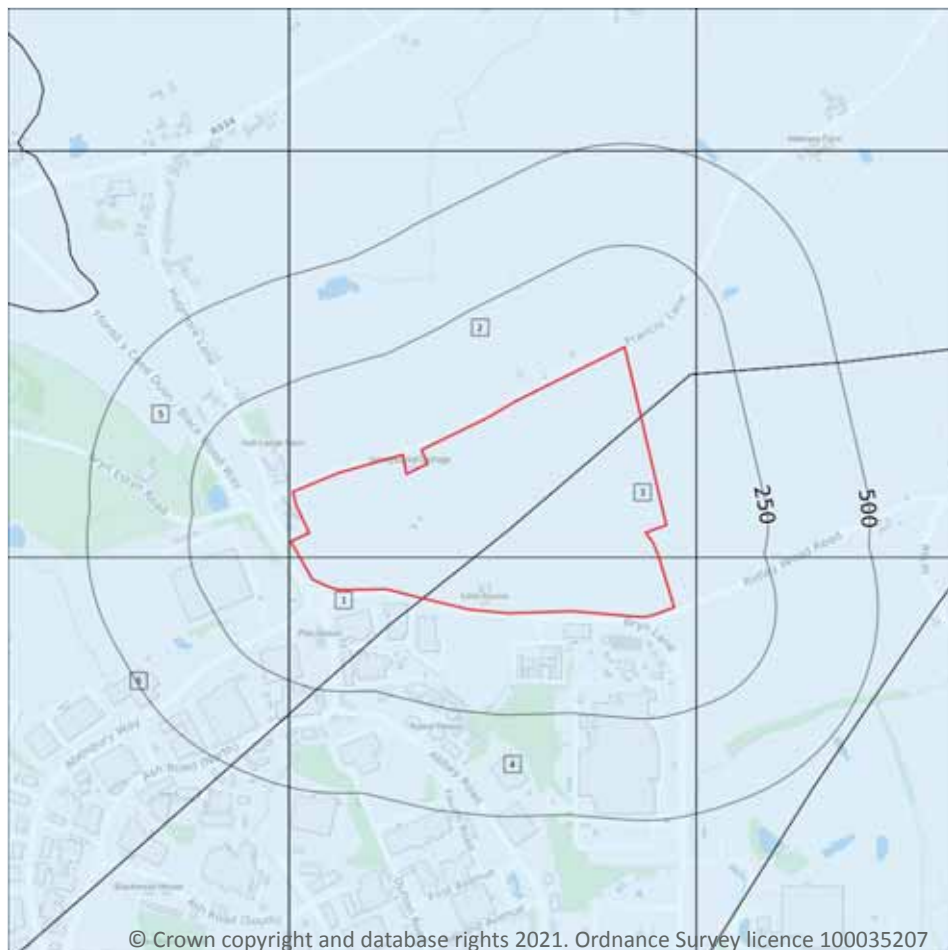
ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers



This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

6

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 53**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
5	4m W	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Intergranular
6	23m SW	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



5.4 Groundwater vulnerability- soluble rock risk

Records on site

0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site

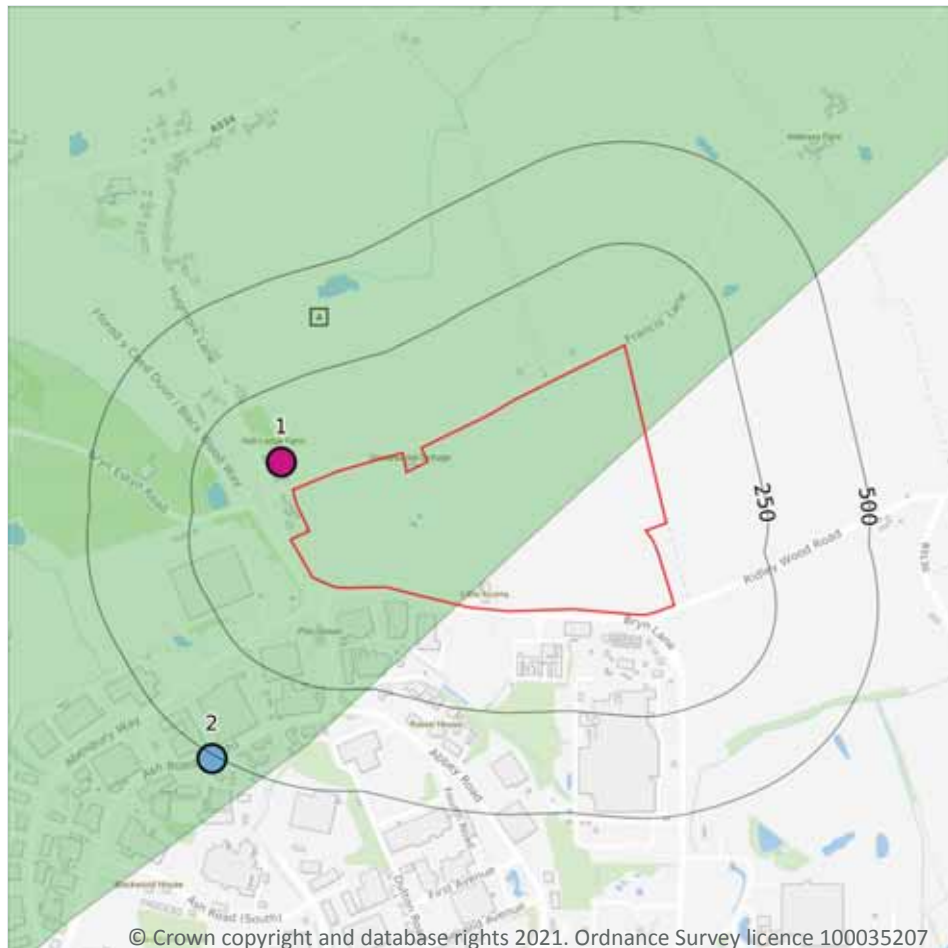
0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.



Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

16

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 56**

ID	Location	Details	
1	74m NW	Status: Historical Licence No: 24/67/9/0130 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL Data Type: Point Name: Taylor Easting: 337980 Northing: 351230	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/06/1968 Expiry Date: - Issue No: 100 Version Start Date: 14/06/1968 Version End Date: -
-	1457m NW	Status: Historical Licence No: 24/67/7/0197 Details: Mineral Washing Direct Source: EAW Groundwater Point: BOREHOLE Data Type: Point Name: Lafarge Tarmac Trading Limited Easting: 336870 Northing: 352070	Annual Volume (m ³): 195180 Max Daily Volume (m ³): 533.28 Original Application No: - Original Start Date: 25/08/1982 Expiry Date: - Issue No: 103 Version Start Date: 27/03/2014 Version End Date: -
-	1457m NW	Status: Active Licence No: 24/67/7/0197 Details: Mineral Washing - Low Direct Source: Carboniferous strata at Llan y Pwll, Wrexham Point: - Data Type: Point Name: - Easting: 336870 Northing: 352070	Annual Volume (m ³): 195,180 Max Daily Volume (m ³): 533.28 Original Application No: - Original Start Date: 2019-03-22 00:00:00.0000000 Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1480m E	Status: Historical Licence No: 24/67/7/0171 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE Data Type: Point Name: Davies Easting: 340410 Northing: 350660	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/01/1969 Expiry Date: - Issue No: 100 Version Start Date: 31/01/1994 Version End Date: -
-	1488m E	Status: Historical Licence No: 24/67/7/0107 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL Data Type: Point Name: Evans Easting: 340420 Northing: 350670	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 25/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/10/1966 Version End Date: -



ID	Location	Details	
-	1681m S	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144 M DEEP, 200MM DIA BH AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338360 Northing: 349190	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	1681m S	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144 M DEEP, 200MM DIA BH AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338360 Northing: 349190	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -
-	1692m S	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: SPECTRUM BUSINESS PARK BOREHOLE AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338350 Northing: 349180	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	1793m S	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	1793m S	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -



ID	Location	Details	
-	1793m S	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	1947m E	Status: Historical Licence No: 24/67/7/0095 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE Data Type: Point Name: Rigby Easting: 340870 Northing: 350580	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 25/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/10/1966 Version End Date: -
-	1948m S	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	1948m S	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -
-	1948m S	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -



ID	Location	Details	
-	1948m S	Status: Active Licence No: WA/067/0007/006 Details: Process Water - Medium Direct Source: Underground strata Point: - Data Type: Point Name: - Easting: 338190 Northing: 348940	Annual Volume (m ³): 131,400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 2016-10-02 00:00:00.0000000 Expiry Date: 2027-03-30 00:00:00.0000000 Issue No: - Version Start Date: - Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	1
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Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 56**

ID	Location	Details	
2	510m SW	Status: Historical Licence No: 24/67/7/0178 Details: Non-Evaporative Cooling Direct Source: EAW Surface Water Point: TRIBUTARY OF REDWITHER BROOK Data Type: Point Name: Caparo Wire Ltd Easting: 337810 Northing: 350500	Annual Volume (m ³): 9955.74 Max Daily Volume (m ³): 27.276 Original Application No: - Original Start Date: 12/05/1972 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2007 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	0
-----------------------------	----------

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m**2**

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on **page 56**

ID	Location	Type	Description
A	On site	3	Total catchment
A	On site	3	Total catchment

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m**0**

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

11

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 62**

ID	Location	Type of water feature	Ground level	Permanence	Name
3	107m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
C	133m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	166m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	182m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	212m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	212m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	212m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	220m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	224m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	233m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	234m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

10

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 62**



This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 62**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River WB catchment	Dee - Chester Weir to Ceiriog	GB111067057080	Dee Lower Chester Weir to Ceiriog	Dee

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified

1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site.

Features are displayed on the Hydrology map on **page 62**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	2756m NE	River	Dee - Chester Weir to Ceiriog	GB111067057080	Moderate	Fail	Moderate	2016

This data is sourced from the Environment Agency and Natural Resources Wales.



6.5 WFD Groundwater bodies

Records on site

2

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 62**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Dee Permo-Triassic Sandstone	GB41101G202400	Good	Good	Good	2015
A	On site	Dee Permo-Triassic Sandstone	GB41101G202400	Good	Good	Good	2016

This data is sourced from the Environment Agency and Natural Resources Wales.



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m**0**

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m**0**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m**0**

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0
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Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

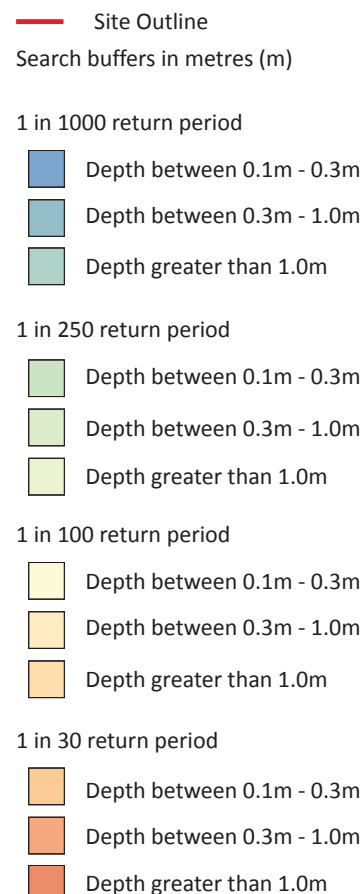
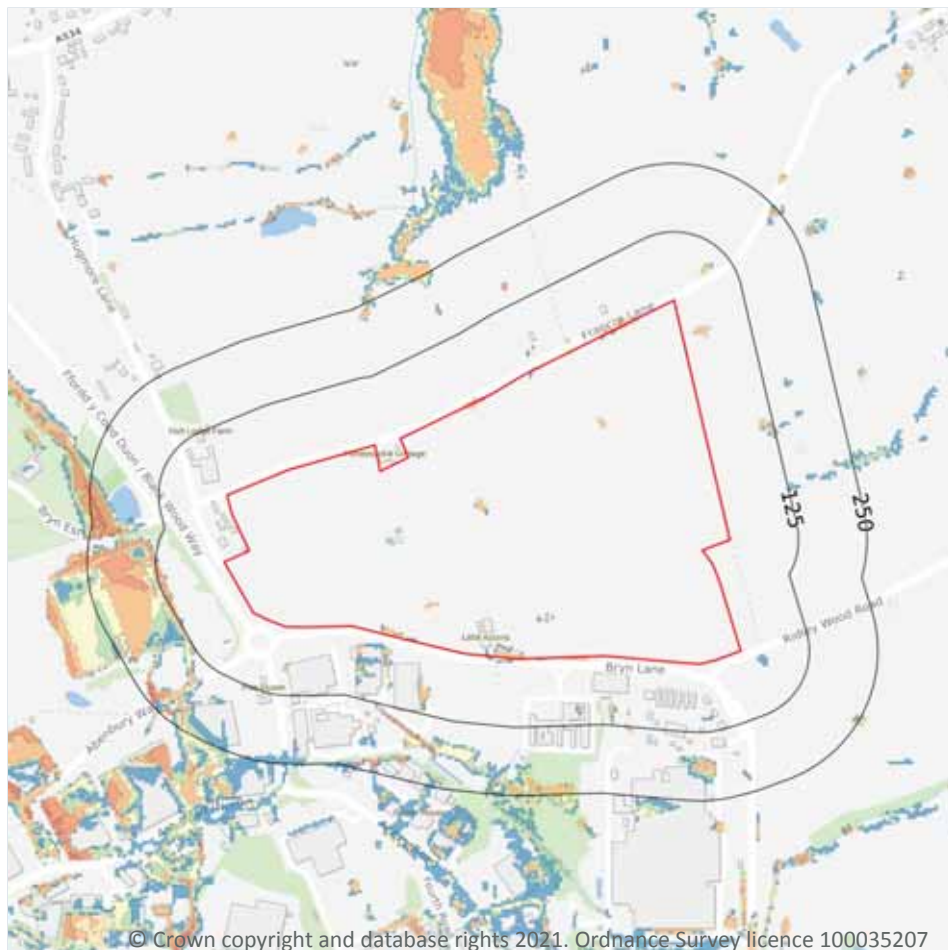
7.7 Flood Zone 3

Records within 50m	0
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Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.3m - 1.0m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 69**

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

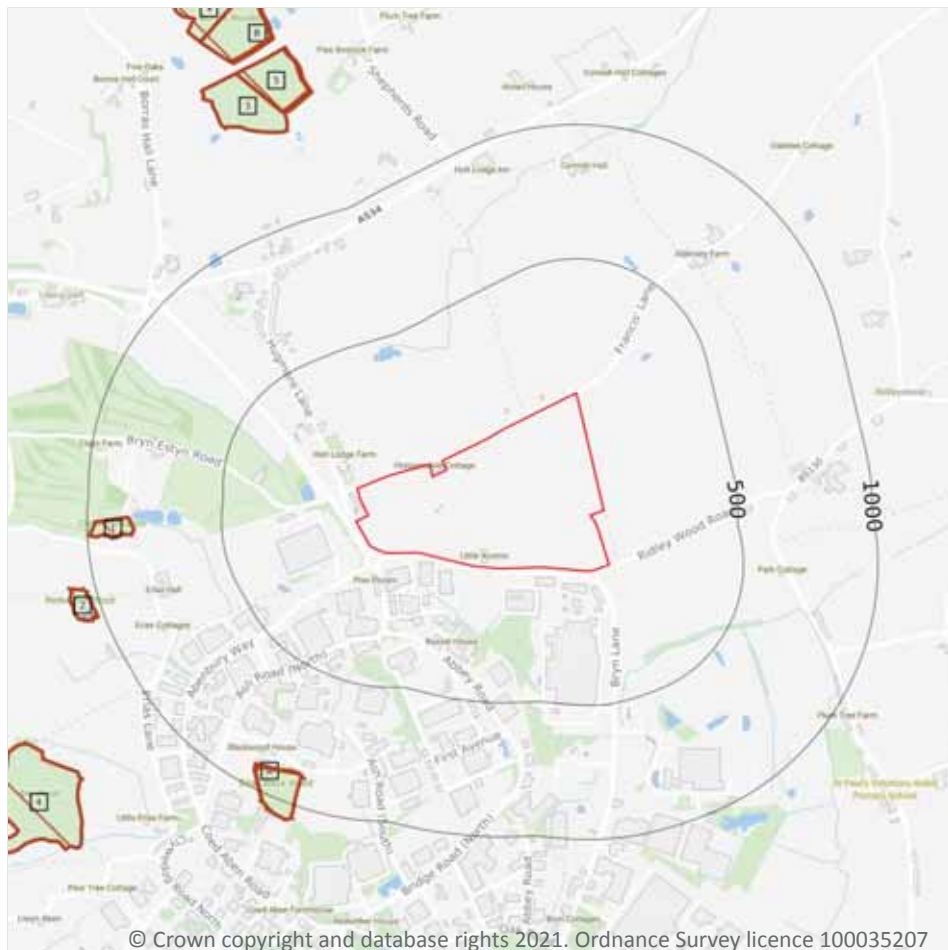
Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 71**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m

0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m

14

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 72**

ID	Location	Name	Woodland Type
1	826m W	Unknown	Restored Ancient Woodland Site
A	882m S	Unknown	Restored Ancient Woodland Site
A	884m S	Unknown	Restored Ancient Woodland Site
2	1023m W	Unknown	Ancient Semi Natural Woodland
3	1340m N	Unknown	Ancient Semi Natural Woodland
4	1376m SW	Unknown	Ancient Semi Natural Woodland
5	1415m N	Unknown	Ancient Semi Natural Woodland
B	1641m N	Unknown	Ancient Woodland Site of Unknown Category
-	1646m S	Unknown	Ancient Semi Natural Woodland
B	1649m N	Unknown	Ancient Woodland Site of Unknown Category
-	1691m NW	Unknown	Ancient Semi Natural Woodland
-	1755m W	Unknown	Ancient Semi Natural Woodland
9	1761m NW	Unknown	Ancient Semi Natural Woodland
-	1985m SW	Unknown	Ancient Semi Natural Woodland

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m**0**

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m**0**

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m**0**

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

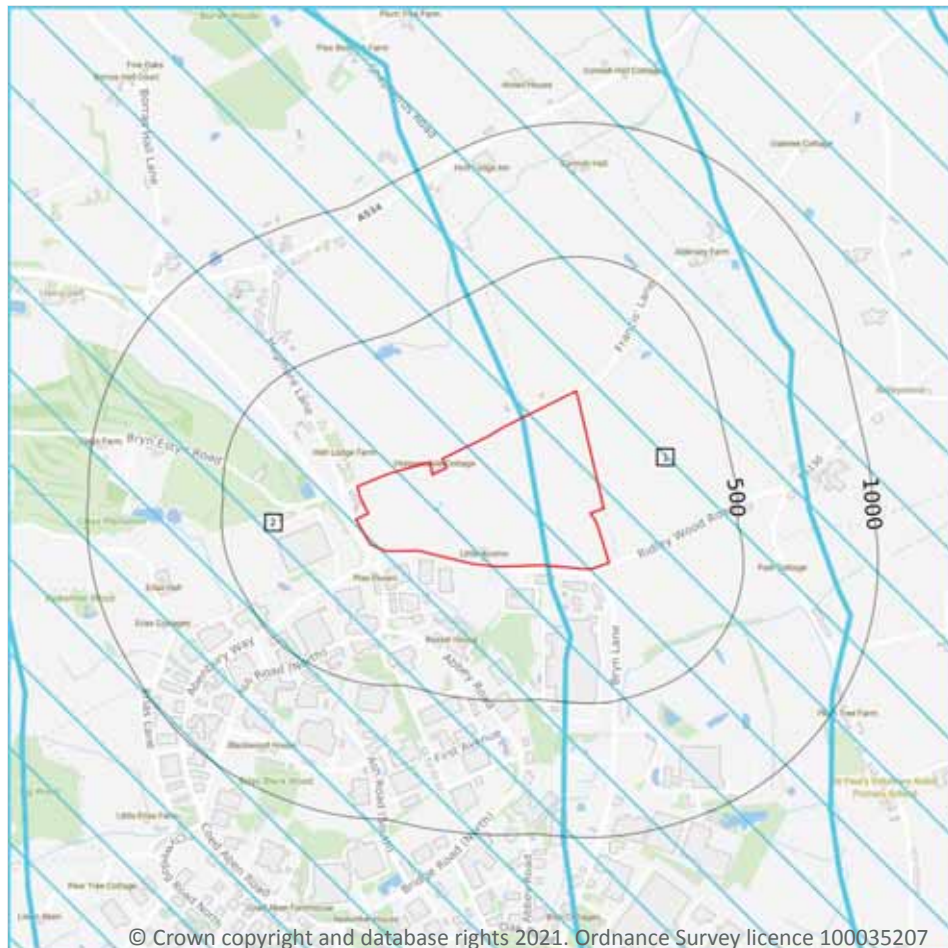
Records within 2000m**0**

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

2

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 77**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t) Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion
2	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t) Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

1

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on **page 79**

ID	Location	Name	Grade	Reference Number	Listed date
1	120m NW	New Holt Lodge Farm, Situated At Crossroads Where Hugmore Lane Meets Francis' Lane And Brynestyn Road	II	1541	09/06/1952

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Timber felling licences
- Open Access land

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12.1 Agricultural Land Classification

Records within 250m

2

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 82**

ID	Location	Classification	Description
2	On site	Grade 3b	Moderate quality agricultural land
3	23m SW	Grade 3a	Good to moderate quality agricultural land

This data is sourced from Natural Resources Wales.



12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m

0

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

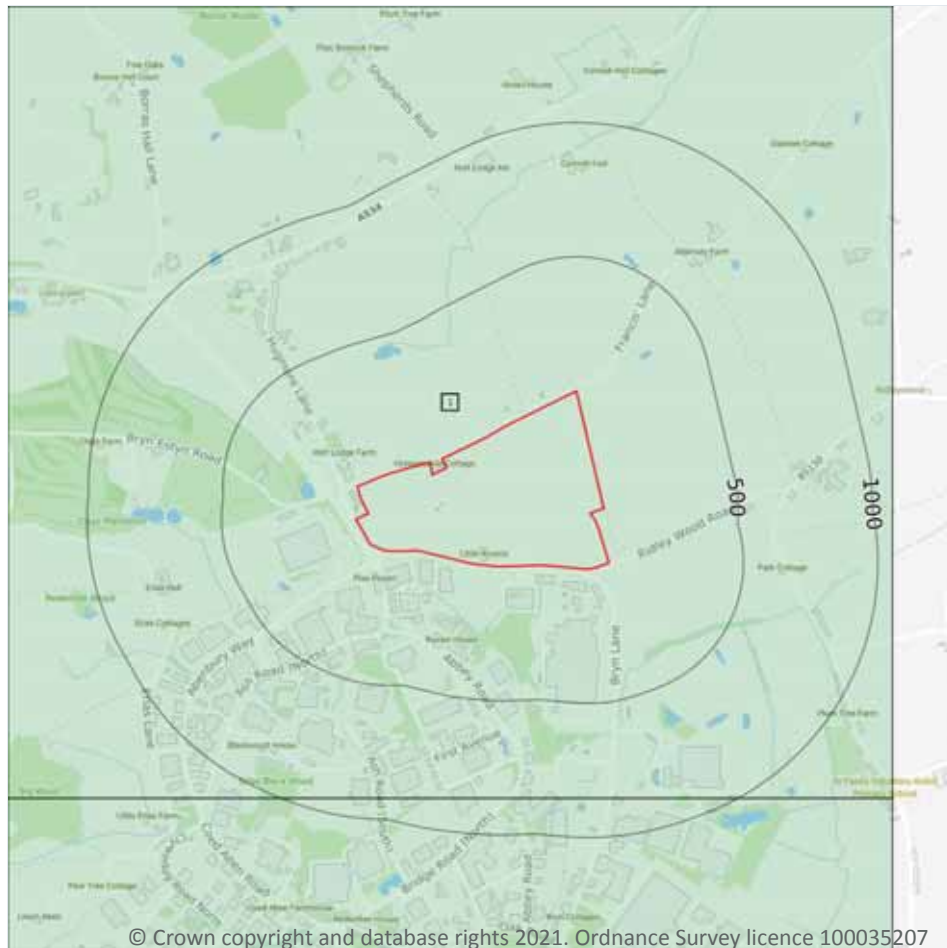
0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

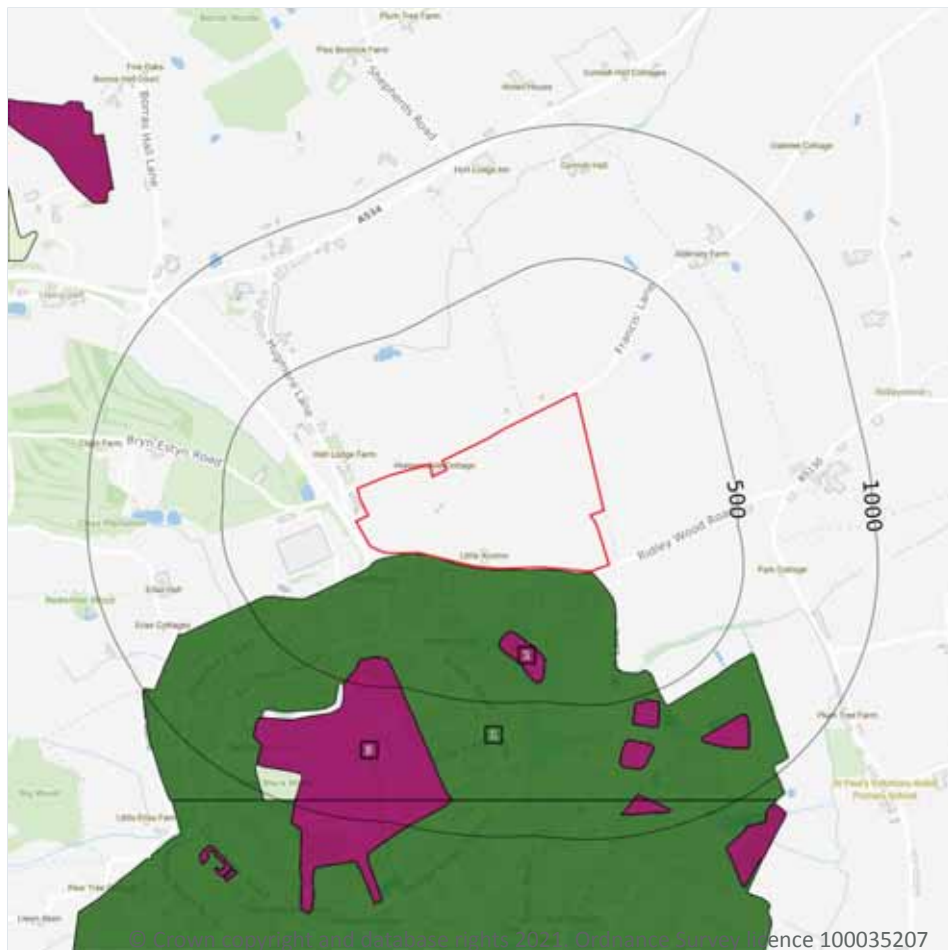
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 85**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SJ35SE

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground



— Site Outline
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

3

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

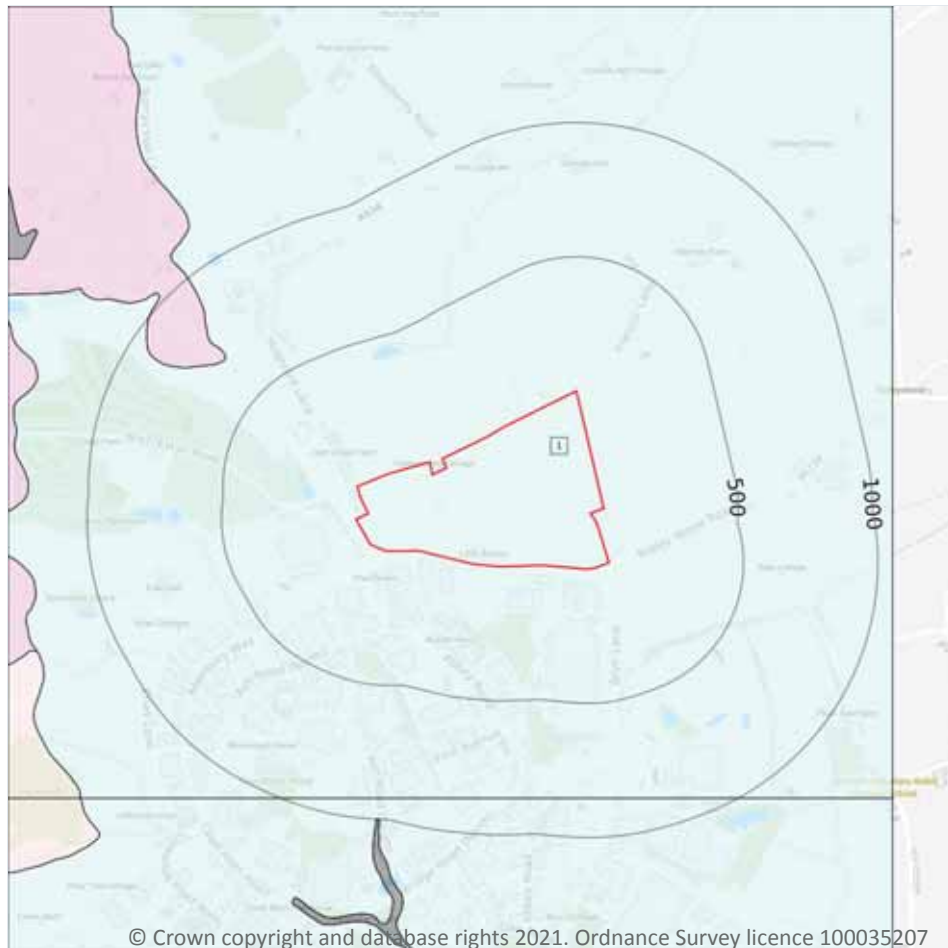
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 86**

ID	Location	LEX Code	Description	Rock description
1	1m S	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
2	236m S	MGR-UNKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
3	389m S	MGR-UNKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (10k)
- Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

1

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 87**

ID	Location	LEX Code	Description	Rock description
1	On site	TILL-DMTN	Till - Diamicton	Diamicton

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

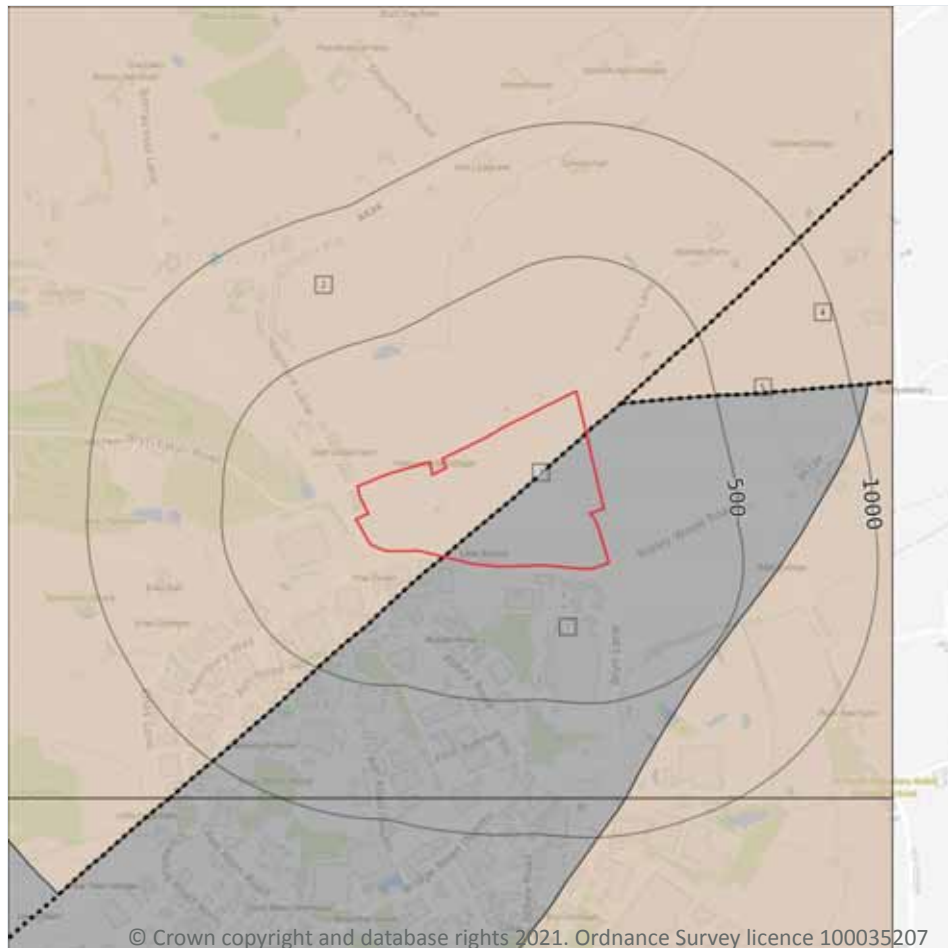
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

3

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 89**

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-MDST	Salop Formation - Mudstone	Cisuralian Epoch - Westphalian D Sub-age
2	On site	KNSF-SDST	Kinnerton Sandstone Formation - Sandstone	Early Triassic Epoch
4	152m E	KNSF-SDST	Kinnerton Sandstone Formation - Sandstone	Early Triassic Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

2

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

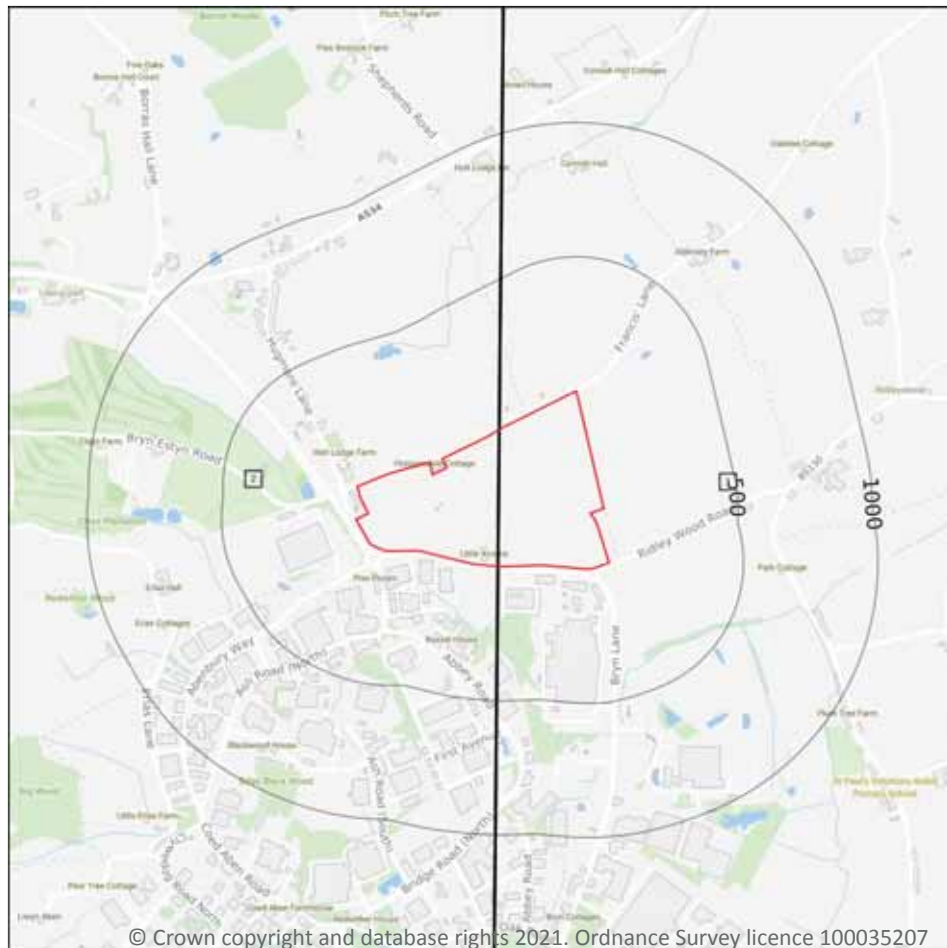
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 89**

ID	Location	Category	Description
3	On site	FAULT	Normal fault, inferred
5	152m E	FAULT	Normal fault, inferred

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

2

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

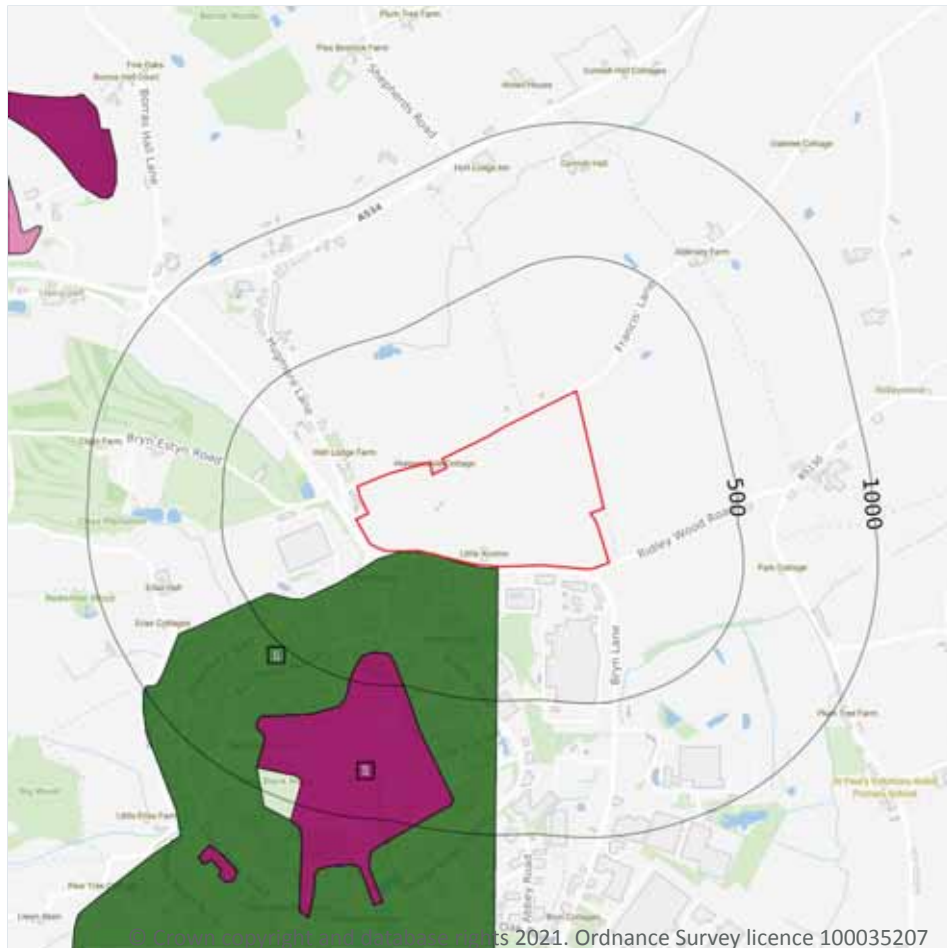
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 91**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	Full	EW122_nantwich_v4
2	On site	Full	Full	Full	Full	EW121_wrexham_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground



- Site Outline
- Search buffers in metres (m)
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

2

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 92**

ID	Location	LEX Code	Description	Rock description
1	On site	LSGR-ARTGR	LANDSCAPED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND
2	380m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.



15.3 Artificial ground permeability (50k)

Records within 50m

1

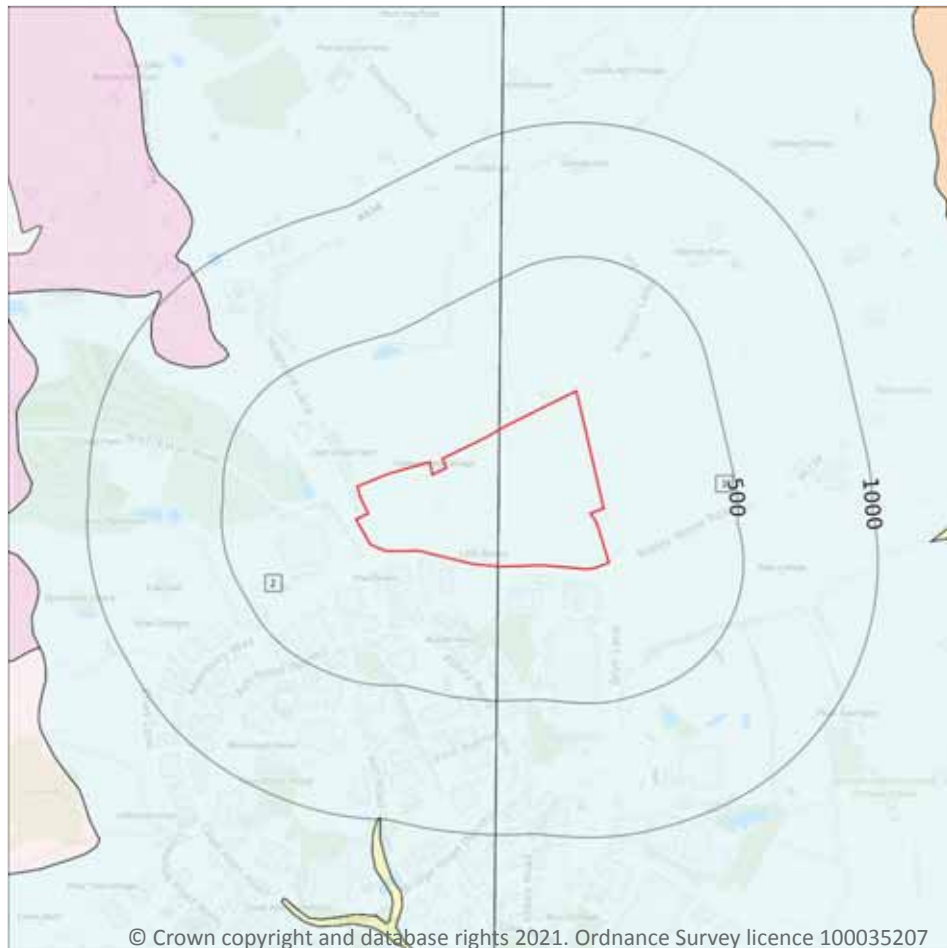
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



— Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

2

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 94**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
2	On site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m**0**

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

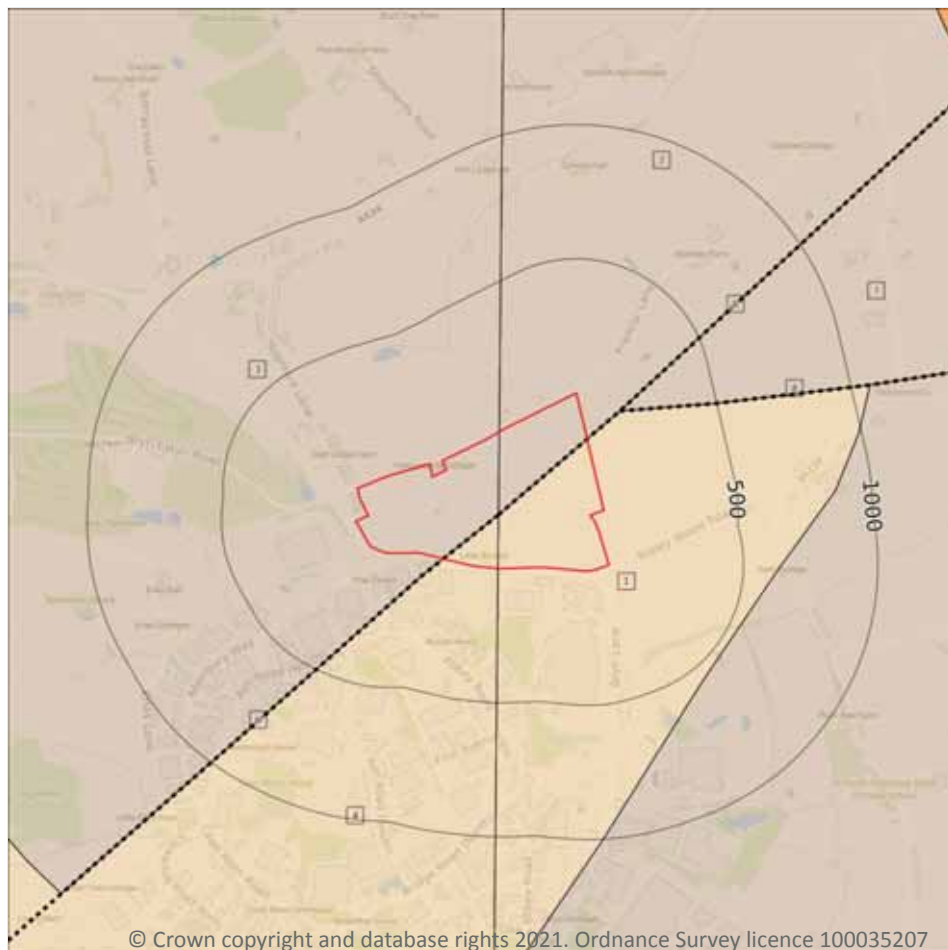
Records within 50m**0**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

5

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 96**

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-MDSC	SALOP FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
2	On site	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-
3	On site	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-



ID	Location	LEX Code	Description	Rock age
4	On site	SAL-MDSC	SALOP FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
7	142m E	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low
On site	Intergranular	High	High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

3

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

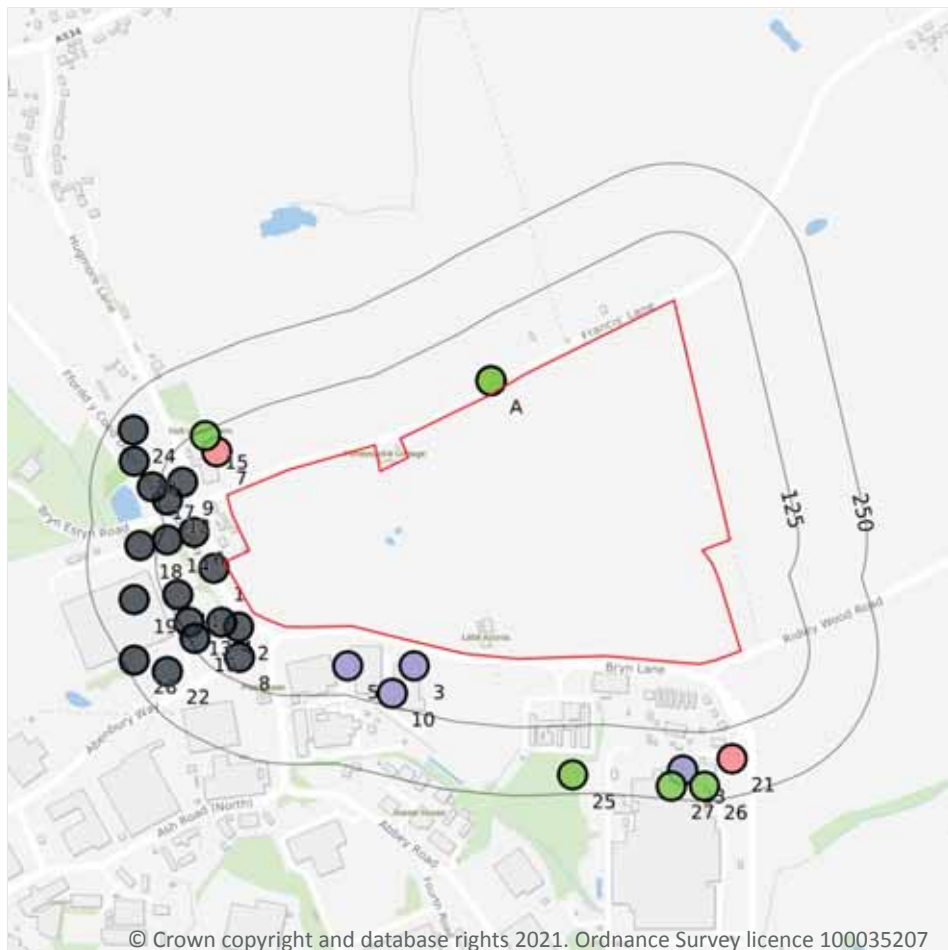
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 96**

ID	Location	Category	Description
5	On site	FAULT	Fault, inferred, displacement unknown
6	On site	FAULT	Fault, inferred, displacement unknown
8	142m E	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

30

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 98**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	21m SW	337986 351028	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD 34	-	Y	N/A
A	22m NW	338490 351370	BIESTON NO.19	18.0	N	154822
A	22m NW	338490 351370	HOLT, HOLT LODGE FARM	18.0	N	154650



ID	Location	Grid reference	Name	Length	Confidential	Web link
2	38m SW	338030 350920	WREXHAM IND EST TP 4	-	Y	N/A
3	43m S	338350 350850	RIDLEY FARM 2	5.03	N	154675
4	58m SW	338000 350930	WREXHAM IND EST 2	-	Y	N/A
5	72m S	338230 350850	RIDLEY FARM 1	4.88	N	154674
6	77m SW	337949 351093	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP37	-	Y	N/A
7	80m NW	337990 351240	COMMON WOOD FARM	61.57	N	154655
8	83m SW	338032 350866	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP40	-	Y	N/A
9	84m W	337929 351186	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP61	-	Y	N/A
10	101m S	338310 350800	RIDLEY FARM 3	5.03	N	154676
11	103m SW	337920 350980	WREXHAM IND EST TP 2	-	Y	N/A
12	109m W	337901 351152	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP36	-	Y	N/A
13	110m SW	337940 350930	WREXHAM IND EST TP 3	-	Y	N/A
14	112m W	337900 351080	WREXHAM IND EST 1	-	Y	N/A
15	115m NW	337970 351270	HOLT LODGE FARM	20.31	N	154843
16	116m SW	337950 350900	WREXHAM IND EST 3	-	Y	N/A
17	137m W	337873 351177	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD 32	-	Y	N/A
18	157m W	337850 351070	WREXHAM IND EST TP 1	-	Y	N/A
19	178m SW	337840 350970	WREXHAM IND EST 5	-	Y	N/A
20	181m W	337840 351224	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD TP35	-	Y	N/A
21	182m S	338930 350680	WREXHAM IND ESTATE KELLOGS 1	67.07	N	154667
22	190m SW	337900 350840	WREXHAM IND EST 4	-	Y	N/A
23	195m S	338840 350660	WREXHAM MAELOR TP 1	2.4	N	154808
24	209m NW	337838 351280	WREXHAM INDUSTRIAL ESTATE ACCESS ROAD 31	-	Y	N/A
25	216m S	338640 350650	WREXHAM INDUSTRIAL ESTATE 7	20.0	N	154807
26	223m S	338880 350630	WREXHAM INDUSTRIAL ESTATE 2	20.0	N	154802
27	226m S	338820 350630	WREXHAM INDUSTRIAL ESTATE 3	20.0	N	154803



ID	Location	Grid reference	Name	Length	Confidential	Web link
28	232m SW	337840 350860	WREXHAM IND EST TP 5	-	Y	N/A

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

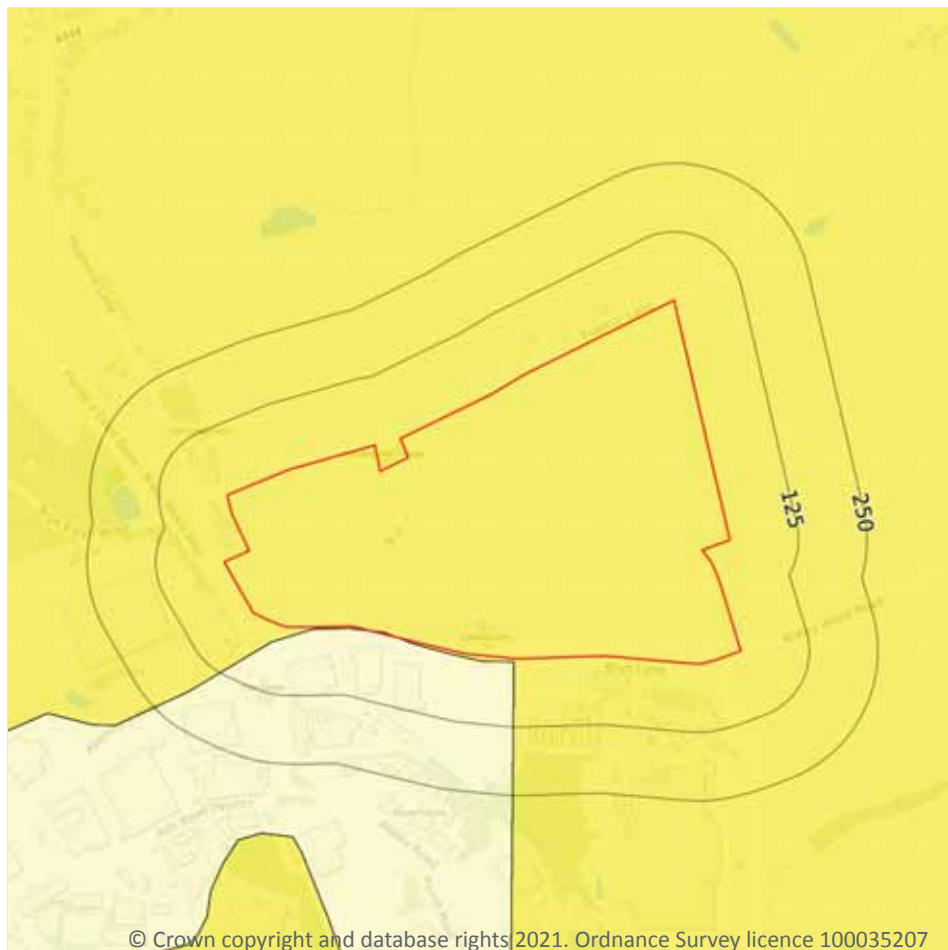
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 101**

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



— Site Outline
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

17.2 Running sands

Records within 50m

2

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 102**

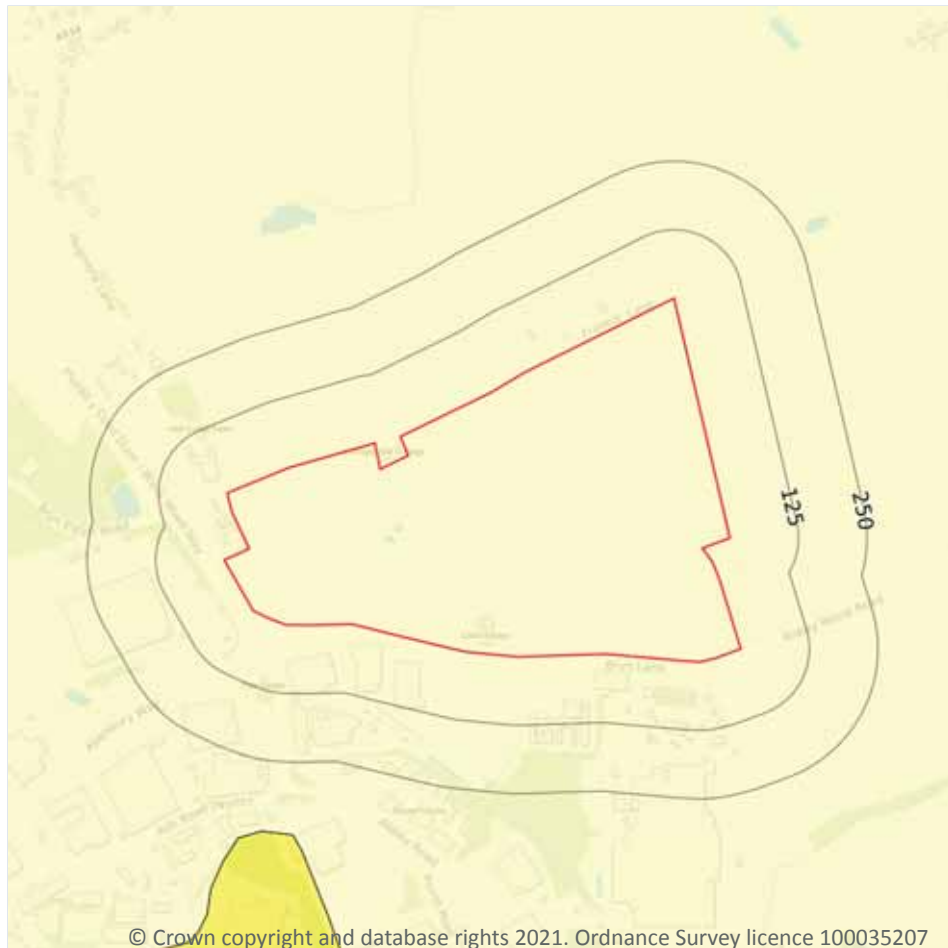
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 104**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 105**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

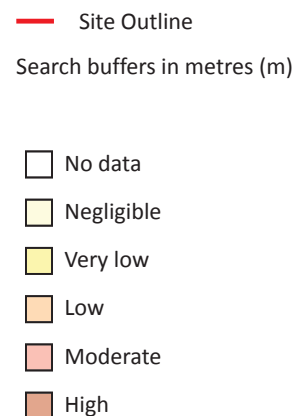
Features are displayed on the Natural ground subsidence - Landslides map on **page 106**

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

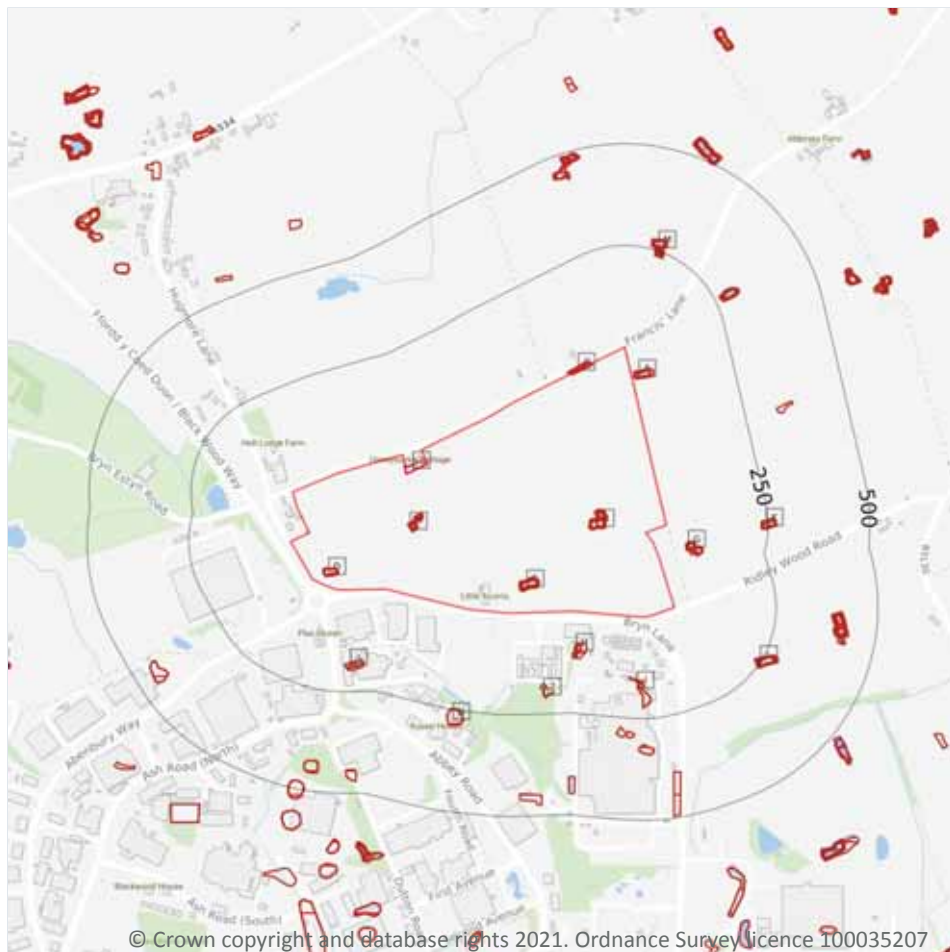
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 107**

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

72

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 109**

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Pond	1914	1:10560
A	On site	Ponds	1992	1:10000
A	On site	Ponds	1982	1:10000
A	On site	Ponds	1960	1:10560
A	On site	Ponds	1968	1:10560
A	On site	Ponds	1900	1:10560
A	On site	Ponds	1914	1:10560
B	On site	Ponds	1982	1:10000
B	On site	Ponds	1960	1:10560
B	On site	Ponds	1968	1:10560
B	On site	Ponds	1900	1:10560
B	On site	Ponds	1914	1:10560
B	On site	Ponds	1949	1:10560
B	On site	Ponds	1872	1:10560
C	On site	Pond	1982	1:10000
C	On site	Pond	1960	1:10560
C	On site	Pond	1968	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	On site	Pond	1872	1:10560
D	On site	Pond	1982	1:10000
D	On site	Pond	1960	1:10560
D	On site	Pond	1968	1:10560
D	On site	Pond	1900	1:10560
E	On site	Pond	1982	1:10000
E	On site	Pond	1960	1:10560
E	On site	Pond	1968	1:10560
E	On site	Pond	1900	1:10560
E	On site	Pond	1914	1:10560
E	On site	Pond	1949	1:10560
E	On site	Pond	1872	1:10560
C	0m NW	Pond	1914	1:10560
F	6m E	Ponds	1900	1:10560
F	8m E	Ponds	1960	1:10560
F	8m E	Ponds	1968	1:10560
F	9m E	Ponds	1914	1:10560
F	15m E	Ponds	1982	1:10000
G	67m SE	Pond	1914	1:10560
G	68m SE	Pond	1982	1:10000
G	68m SE	Pond	1960	1:10560
G	68m SE	Pond	1968	1:10560
G	70m SE	Pond	1949	1:10560
G	74m SE	Ponds	1872	1:10560
H	77m S	Pond	1914	1:10560
H	78m S	Pond	1992	1:10000
H	80m S	Pond	1949	1:10560
I	150m S	Pond	1914	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
I	163m S	Ponds	1960	1:10560
I	163m S	Ponds	1968	1:10560
J	170m S	Ponds	1900	1:10560
J	176m S	Ponds	1872	1:10560
2	177m S	Ponds	1872	1:10560
K	234m E	Pond	1914	1:10560
K	235m E	Pond	1982	1:10000
K	235m E	Pond	1960	1:10560
K	235m E	Pond	1968	1:10560
L	235m SE	Ponds	1900	1:10560
M	237m NE	Ponds	1949	1:10560
M	237m N	Ponds	1900	1:10560
K	238m E	Pond	1872	1:10560
M	238m N	Ponds	1982	1:10000
M	238m N	Ponds	1960	1:10560
M	238m N	Ponds	1968	1:10560
M	239m N	Ponds	1914	1:10560
L	240m SE	Ponds	1914	1:10560
L	240m SE	Ponds	1949	1:10560
M	241m NE	Ponds	1872	1:10560
L	245m SE	Ponds	1872	1:10560
L	246m SE	Ponds	1992	1:10000
L	246m SE	Ponds	1982	1:10000
L	246m SE	Ponds	1960	1:10560
L	246m SE	Ponds	1968	1:10560
N	247m S	Unspecified Heap	1960	1:10560
N	247m S	Unspecified Heap	1968	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m**0**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m**0**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m**0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m**0**

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site**0**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.



18.9 Coal mining

Records on site	1
-----------------	---

Areas which could be affected by past, current or future coal mining.

Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0
-----------------	---

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon



- Site Outline
- Search buffers in metres (m)
- Greater than 30%
 - Between 10% and 30%
 - Between 5% and 10%
 - Between 3% and 5%
 - Between 1% and 3%
 - Less than 1%

19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 115**

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

This data is sourced from the British Geological Survey and Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

13

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 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
4m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
23m SW	15 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.



20.2 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.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m**0**

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.



21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- 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

21.1 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.

21.2 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.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

4

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.

Features are displayed on the Railway infrastructure and projects map on **page 118**

Location	Land Use	Year of mapping	Mapping scale
197m S	Mineral Railway Sidings	1960	2500
225m S	Railway Sidings	1960	10560
225m S	Railway Sidings	1968	10560
230m S	Railway Sidings	1949	10560

This data is sourced from Ordnance Survey/Groundsure.

21.5 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.



21.6 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.

21.7 Railways

Records within 250m**0**

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m**0**

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 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.

21.10 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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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: County Series

Map date: 1872

Scale: 1:10,560

Printed at: 1:10,560



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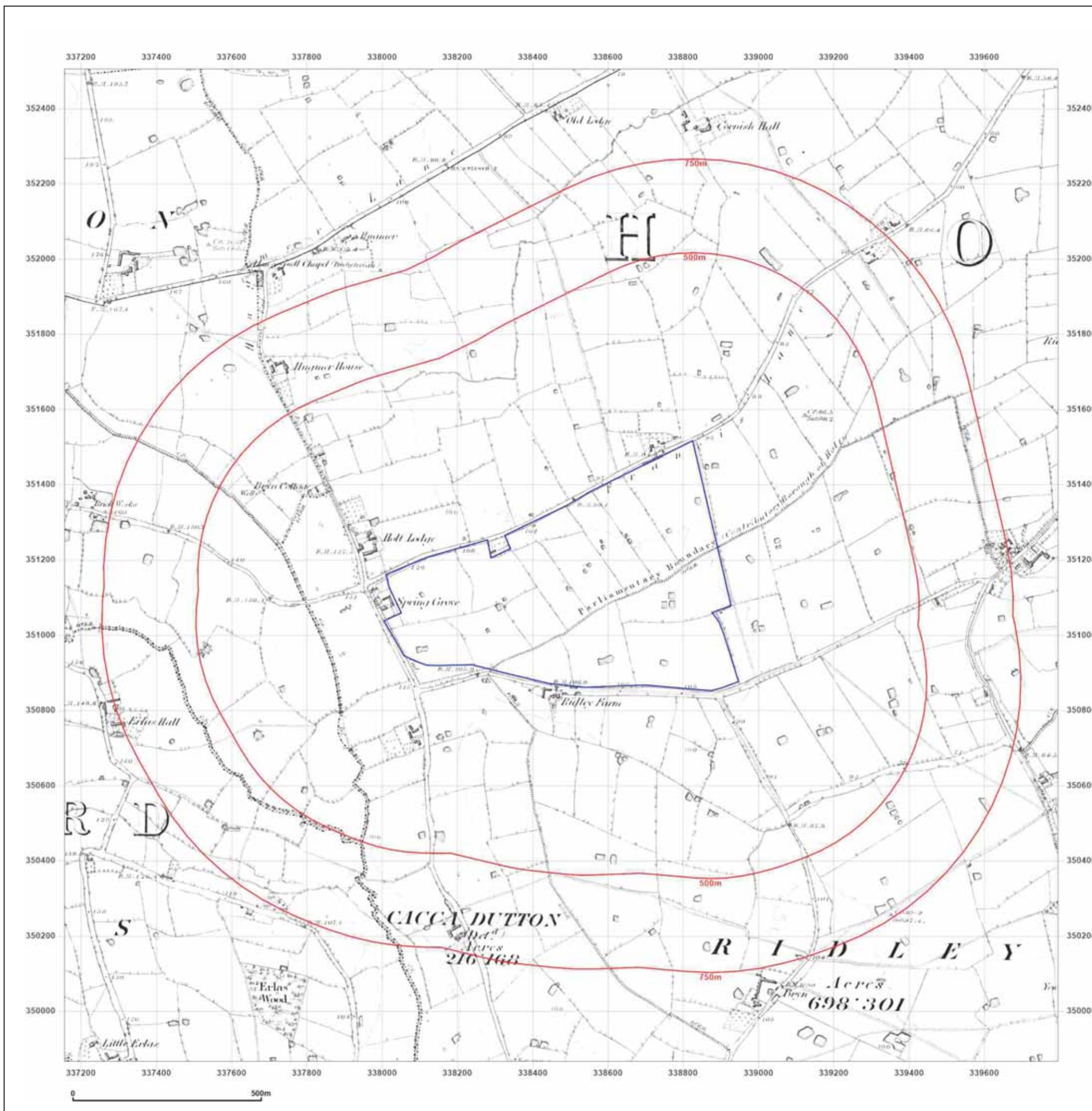


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: County Series

Map date: 1898-1900

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 1872
Revised 1898
Edition N/A
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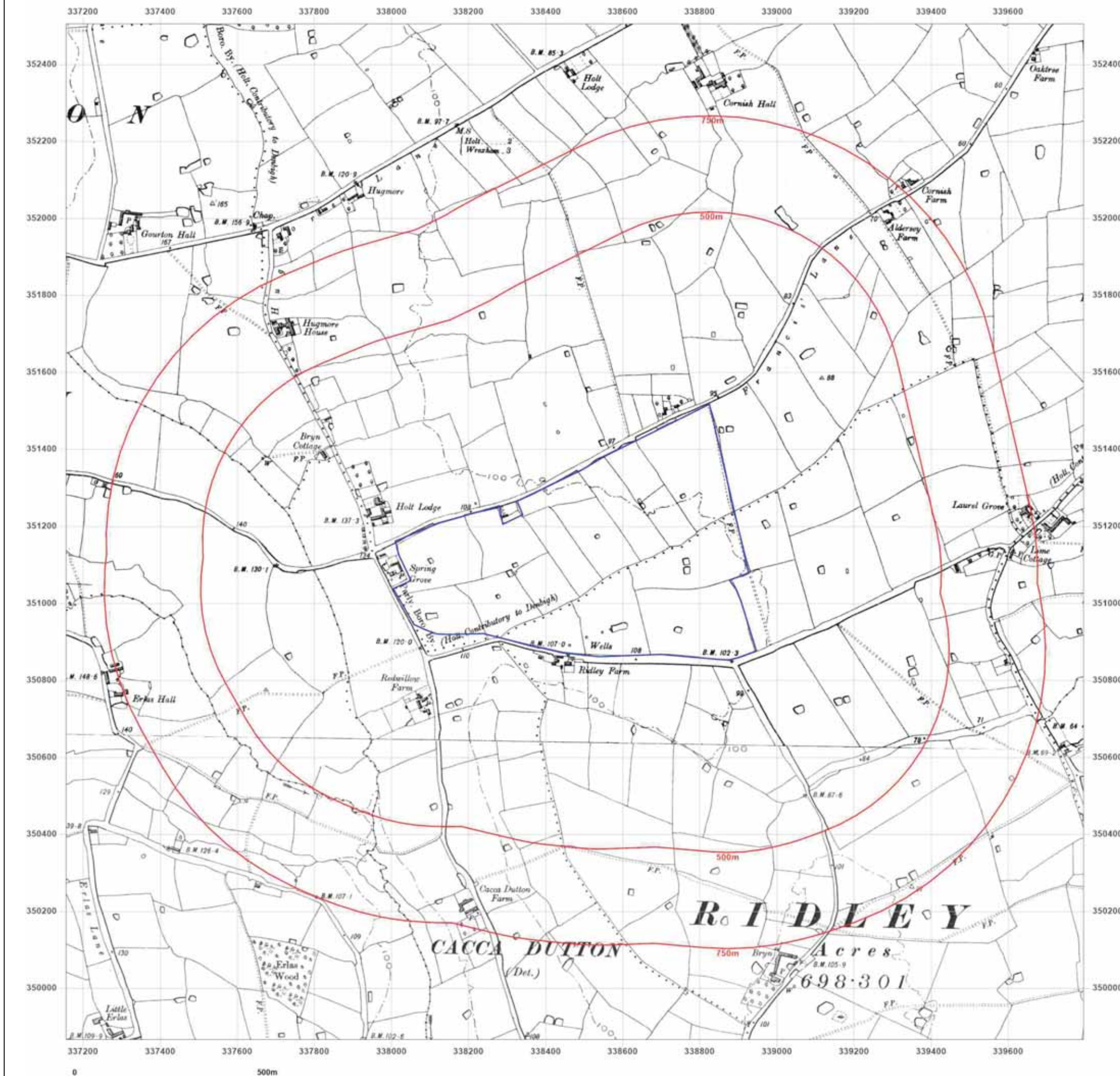


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: County Series

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Printed at: 1:10,560



Surveyed 1872
Revised 1900
Edition N/A
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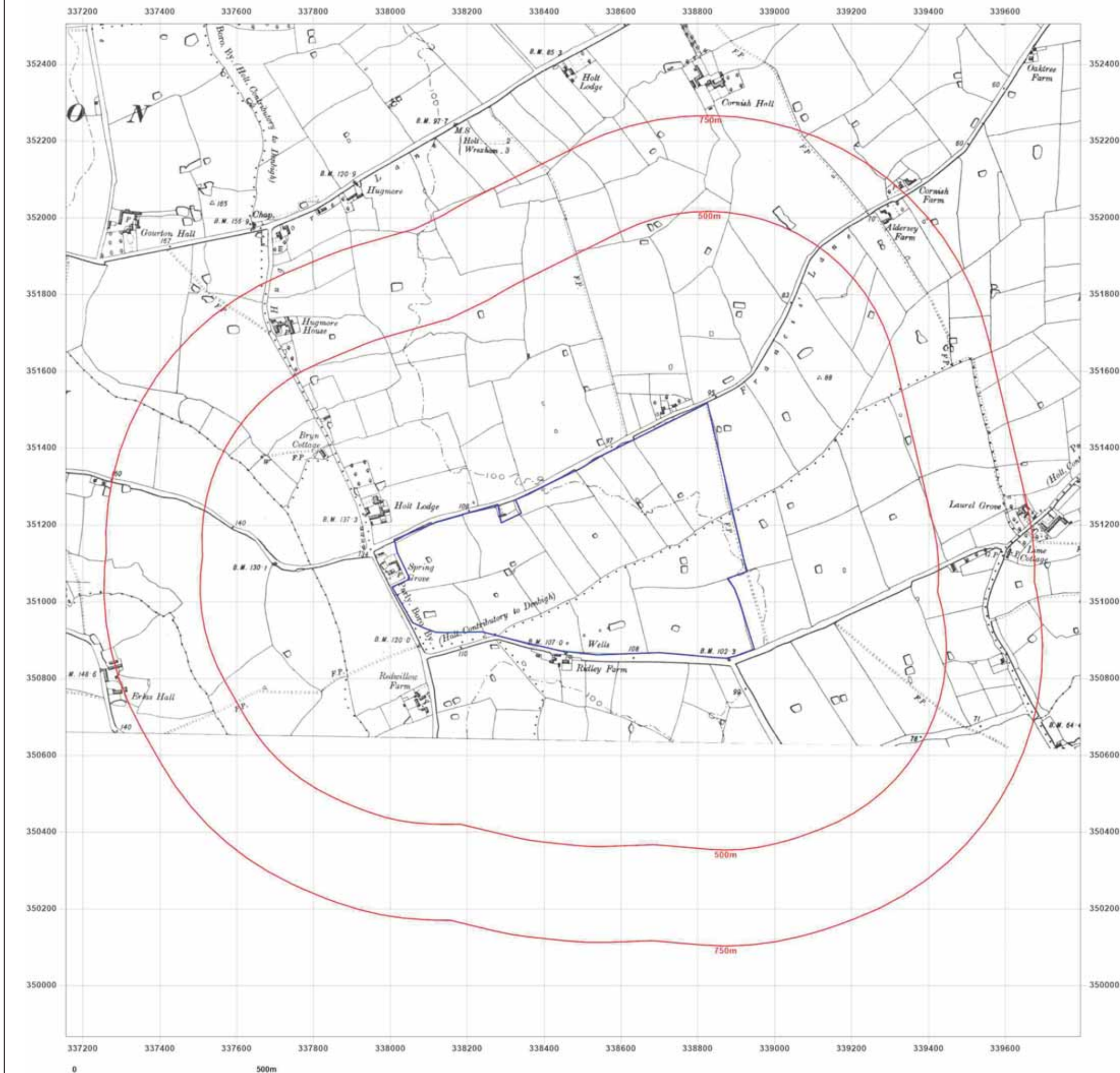


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: County Series

Map date: 1909-1914

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1871
Revised 1914
Edition 1914
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Surveyed 1872
Revised 1909
Edition N/A
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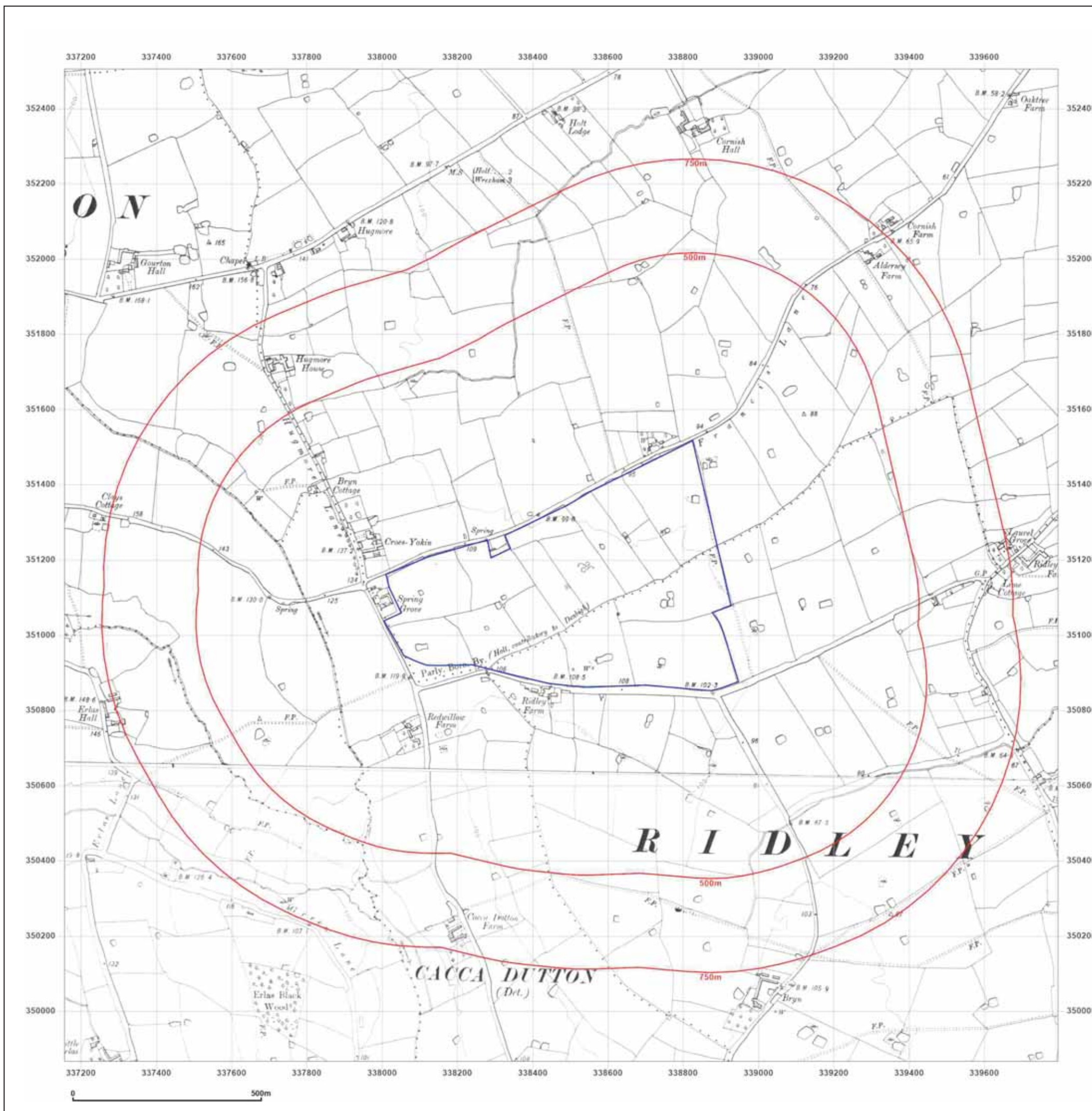


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

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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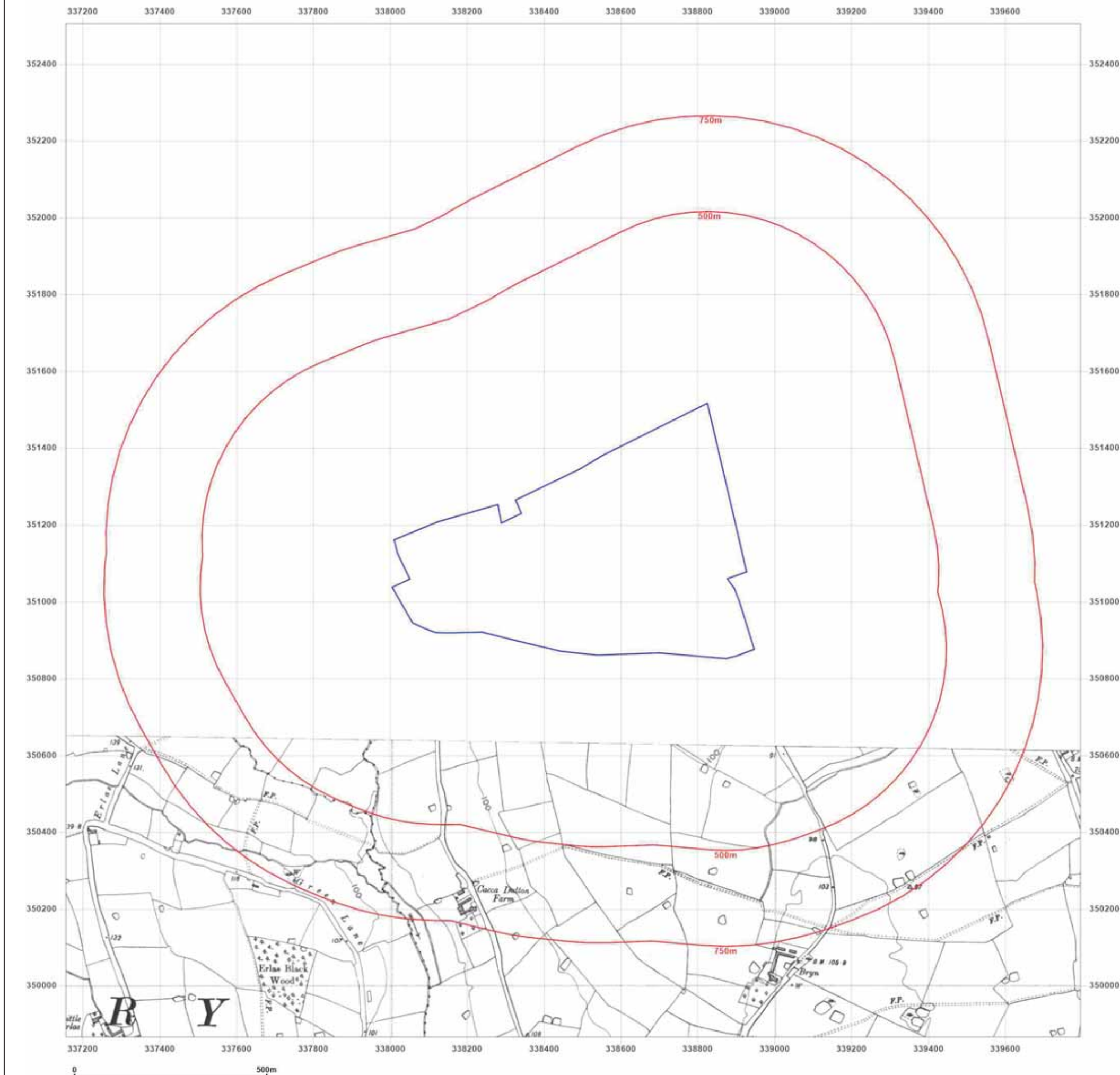


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: County Series

Map date: 1949

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1871
Revised 1949
Edition N/A
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Surveyed 1872
Revised 1949
Edition N/A
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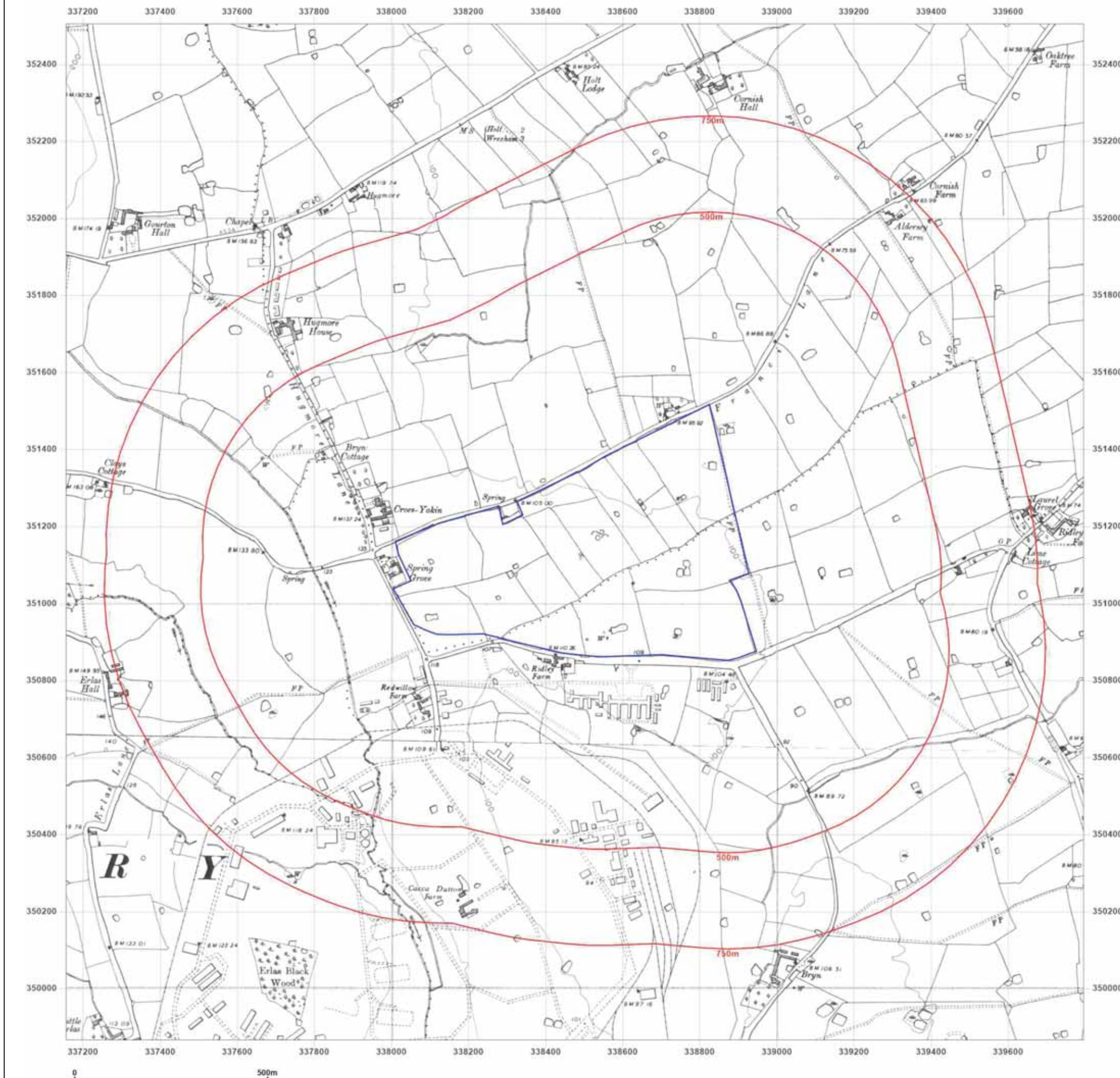


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: Provisional

Map date: 1960-1964

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1874
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Edition N/A
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Surveyed 1964
Revised 1964
Edition N/A
Copyright N/A
Levelled N/A

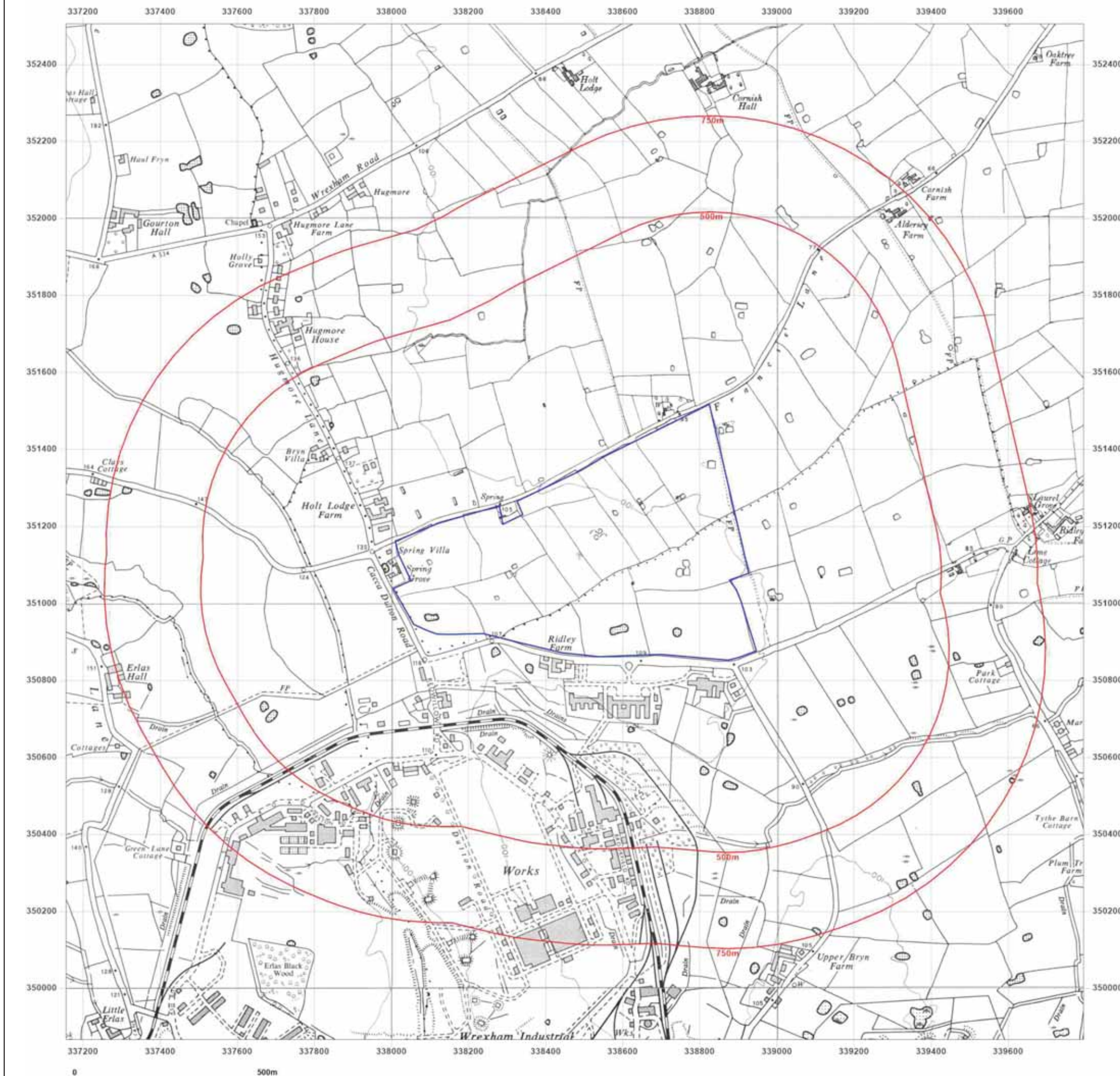


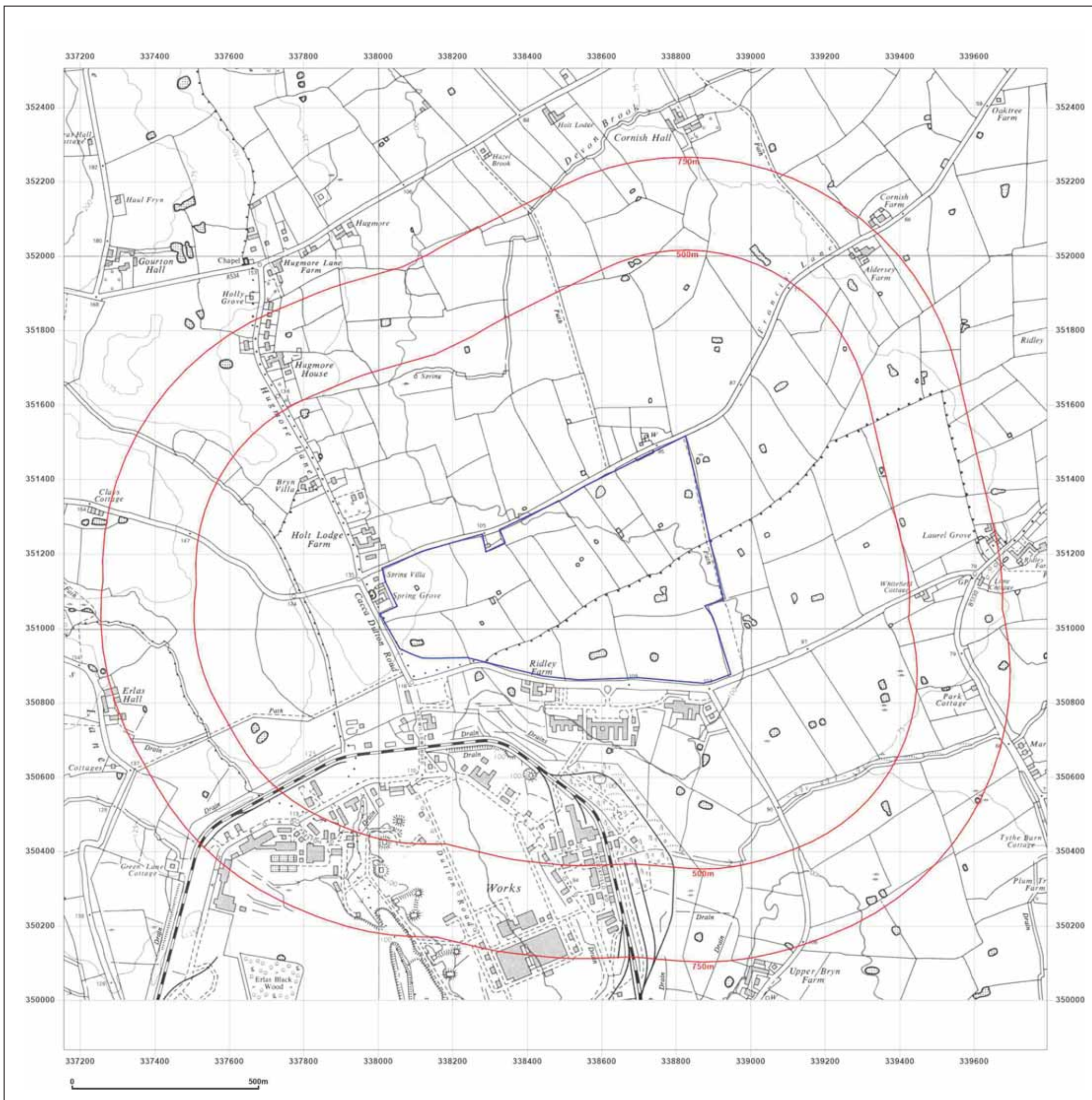
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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name:	Provisional
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Map date: 1968

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Printed at: 1:10,560



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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: National Grid

Map date: 1979-1982

Scale: 1:10,000

Printed at: 1:10,000



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

Surveyed 1975
Revised 1978
Edition N/A
Copyright 1979
Levelled 1969

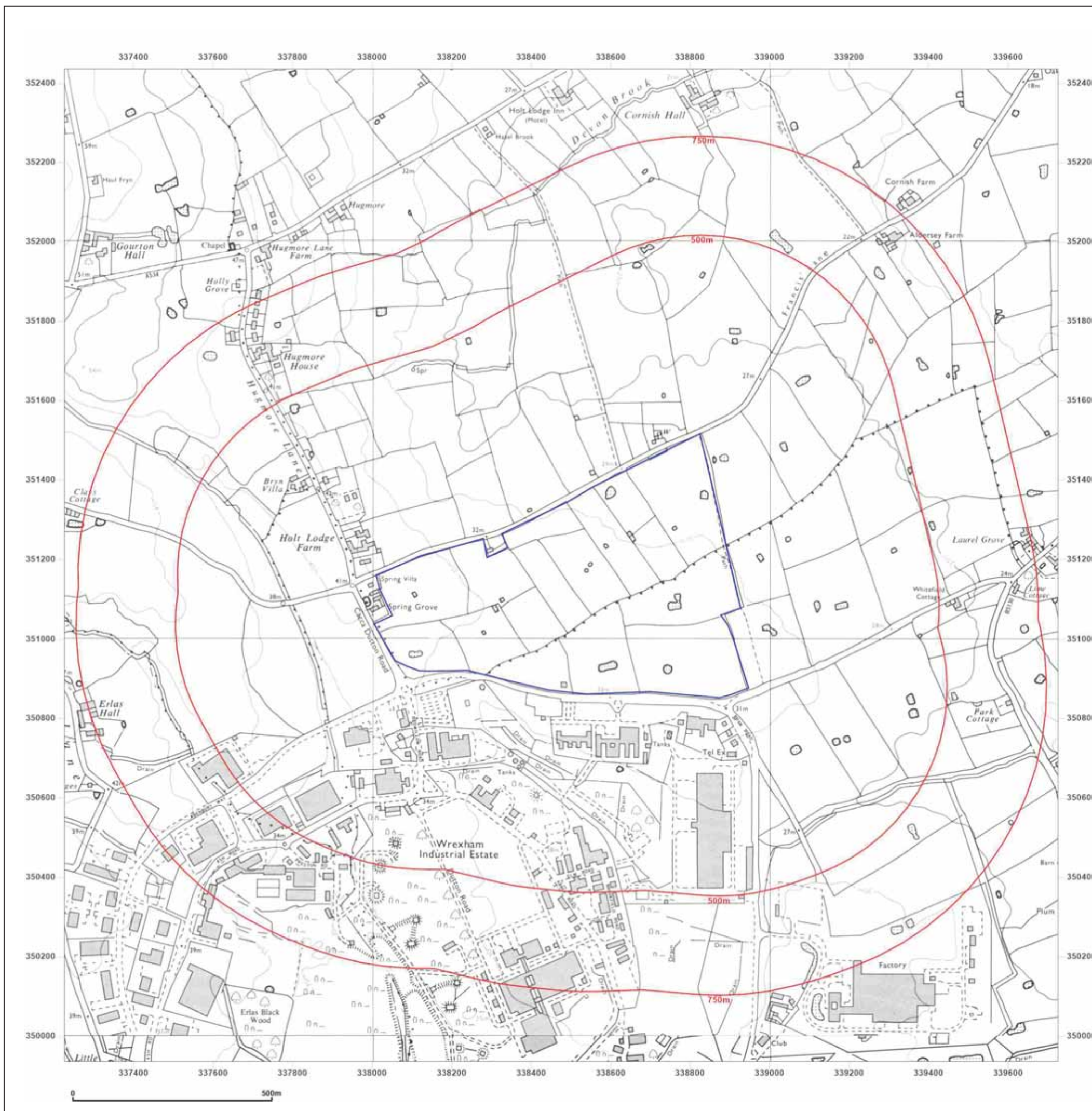


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: National Grid

Map date: 1992

Scale: 1:10,000

Printed at: 1:10,000



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Edition N/A
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Surveyed 1983
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Edition N/A
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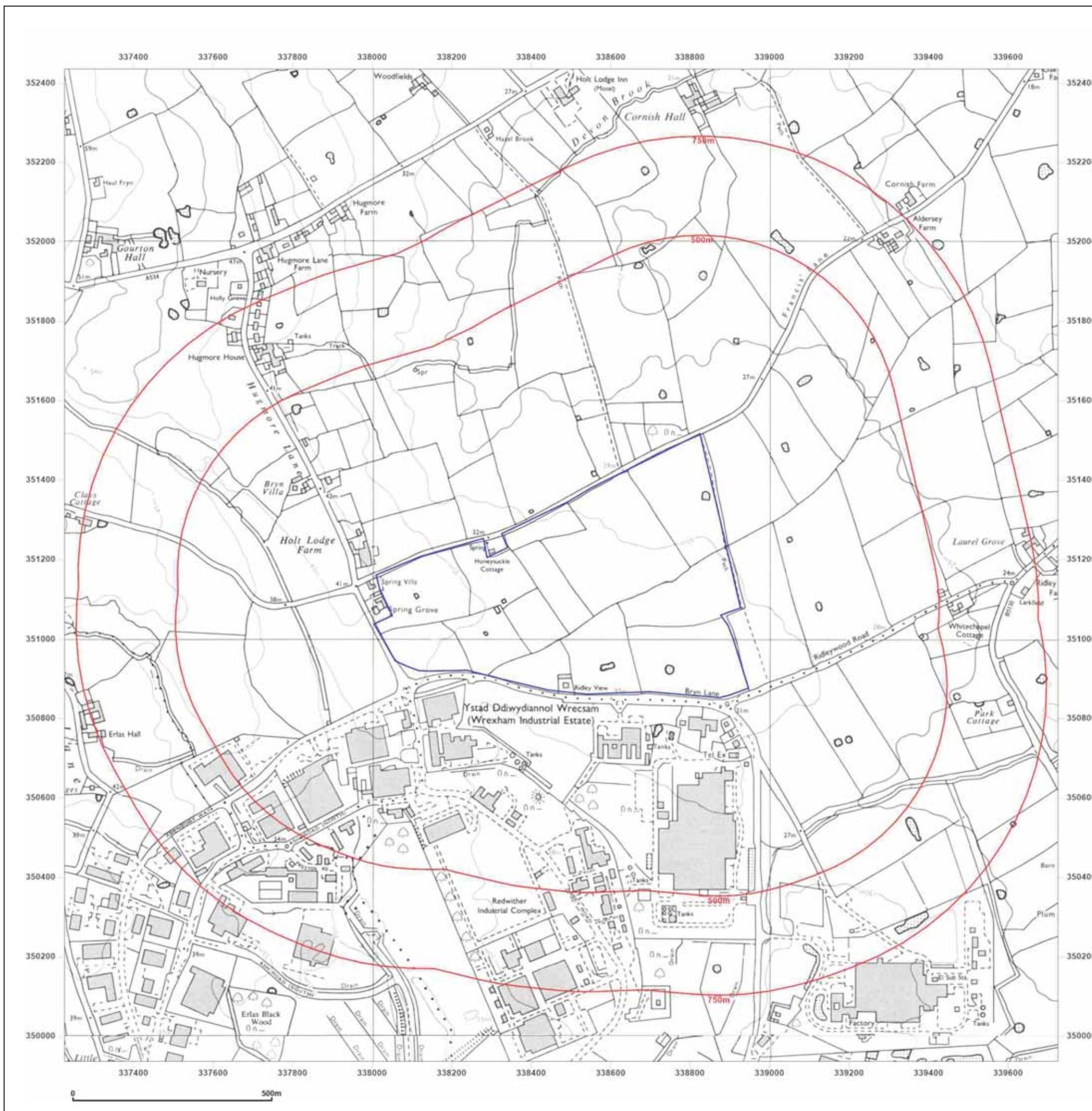


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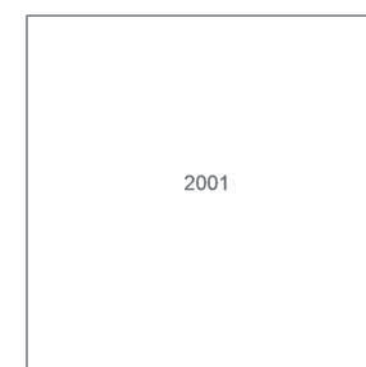
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Map Name: National Grid

Map date: 2001

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Printed at: 1:10,000

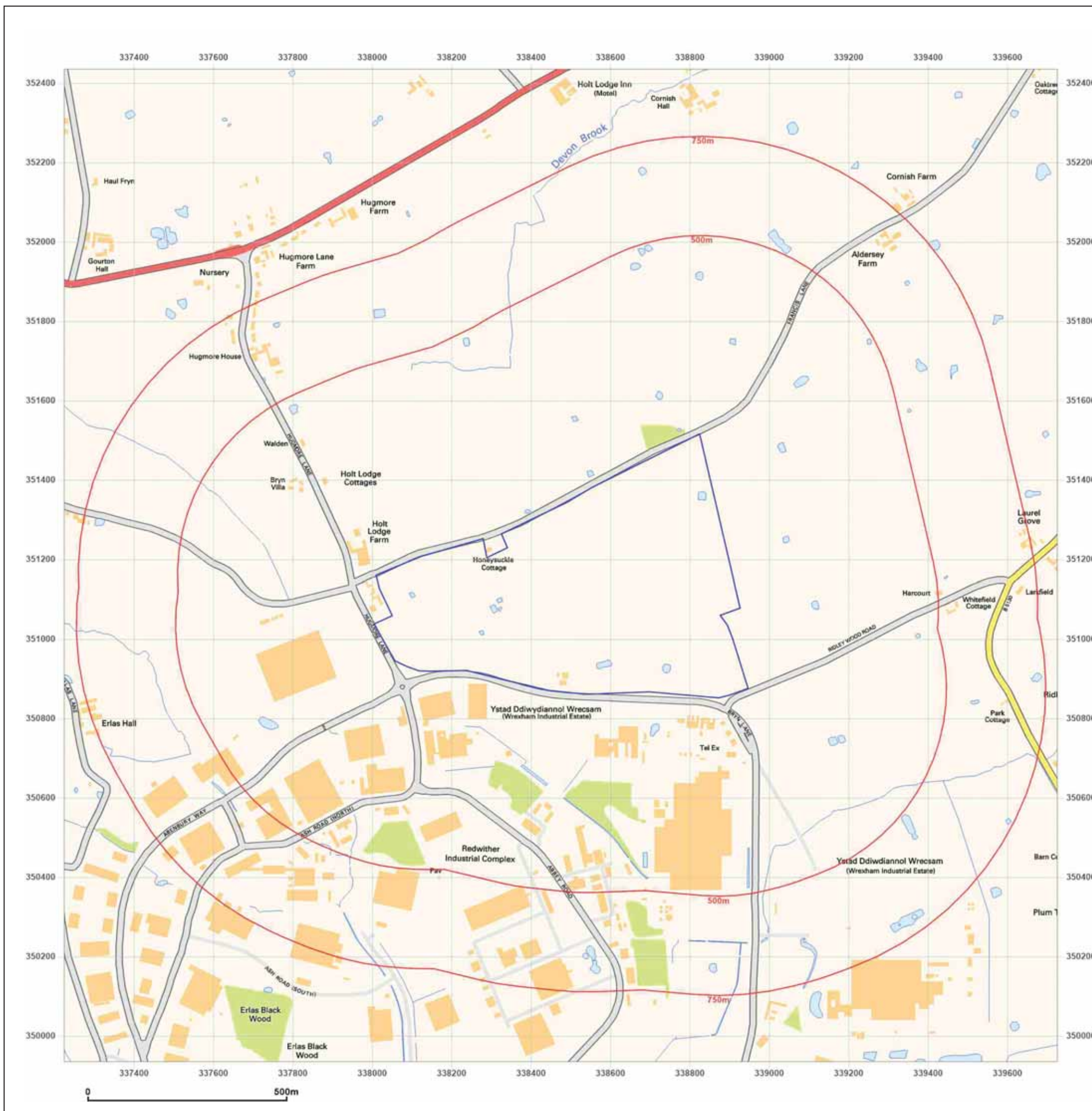


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

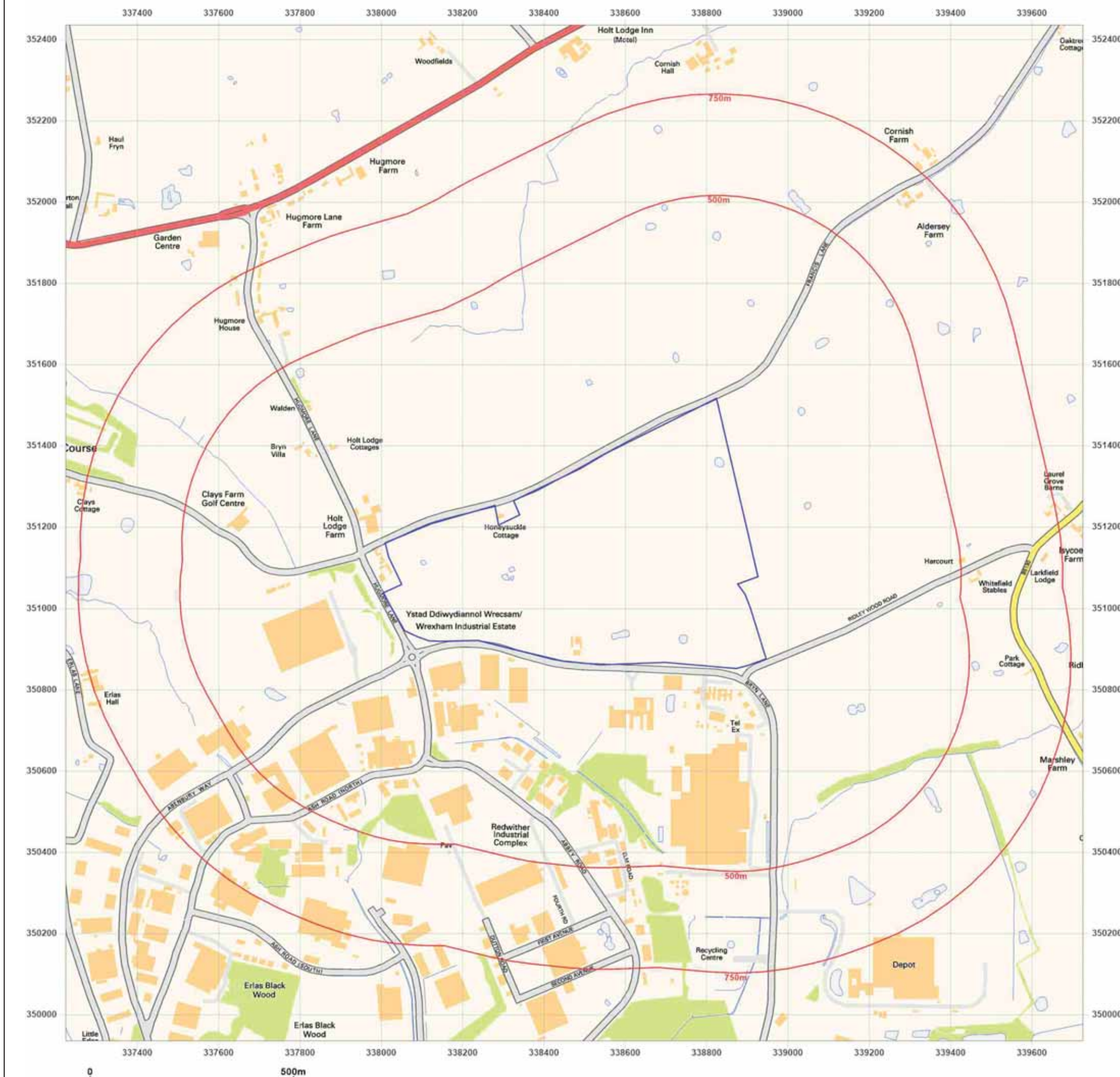


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Client Ref: 1779_TE1624
Report Ref: GS-8287502
Grid Ref: 338475, 351185

Map Name: National Grid

Map date: 2021

Scale: 1:10,000

Printed at: 1:10,000



2021

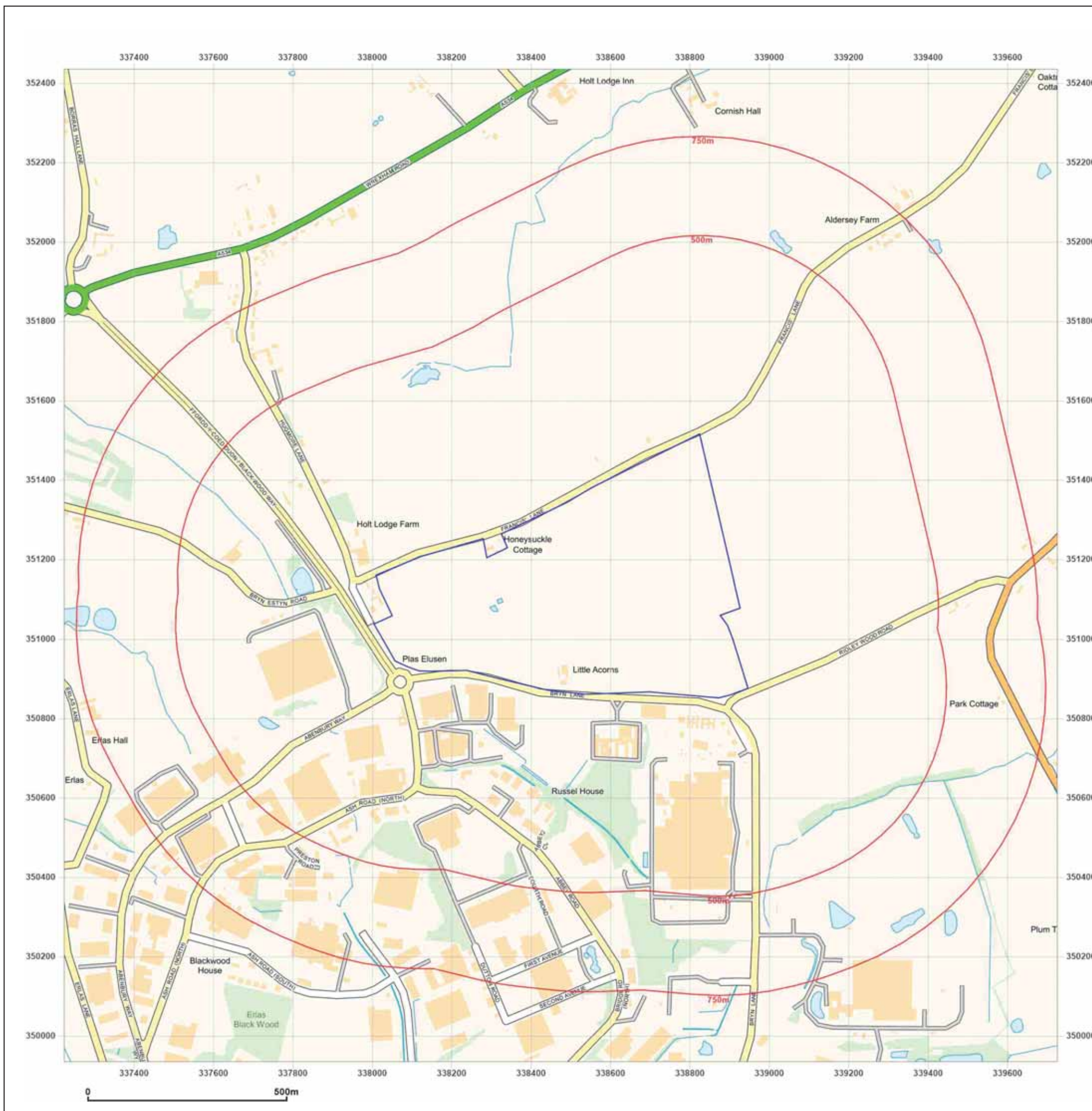


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_Landline_1_1
Grid Ref: 338025, 350885

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003



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Site Details:

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Client Ref: 1779_TE1624
Report Ref: GS-8287502_Landline_1_2
Grid Ref: 338025, 351185

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003

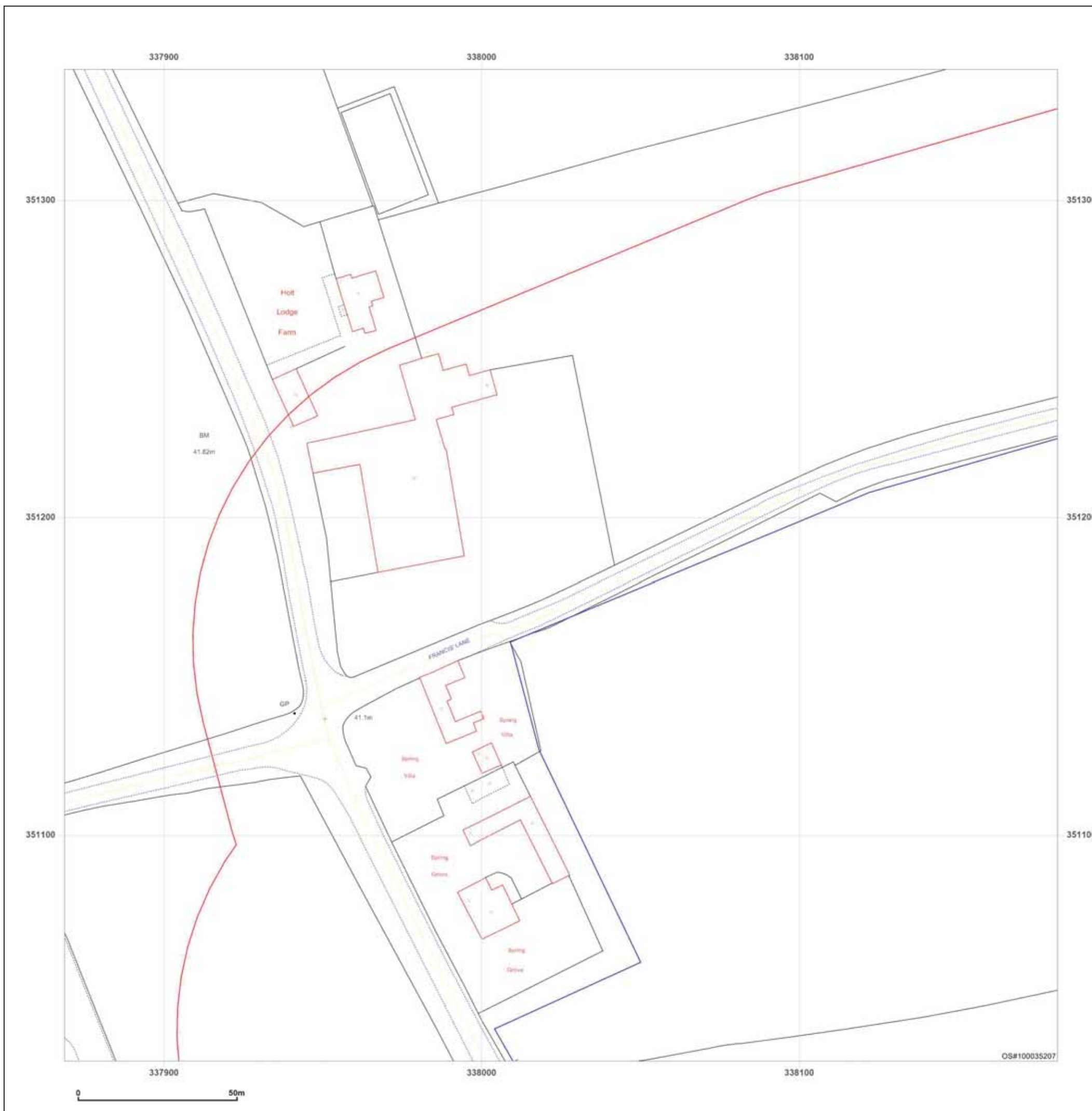


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_Landline_2_1
Grid Ref: 338325, 350885

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003



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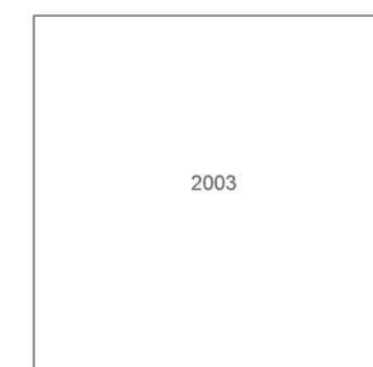
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Report Ref: GS-8287502_Landline_2_2
Grid Ref: 338325, 351185

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

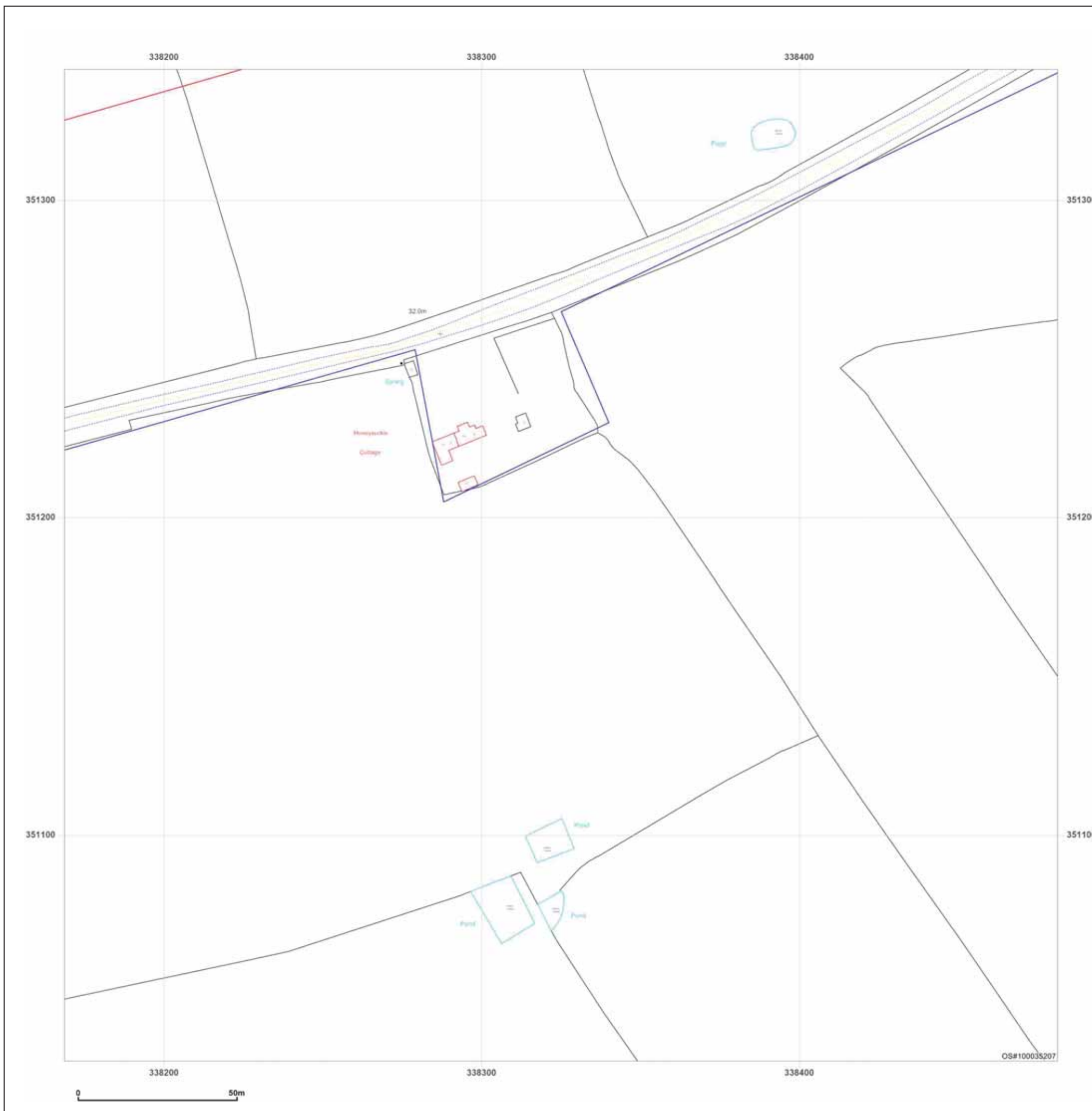


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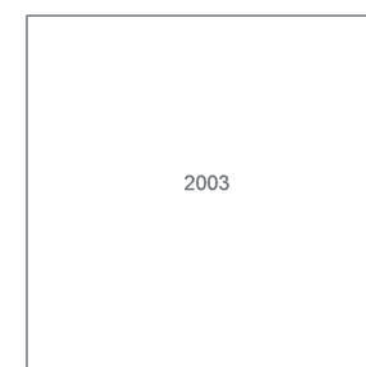
Client Ref: 1779_TE1624
Report Ref: GS-8287502_Landline_2_3
Grid Ref: 338325, 351485

Map Name: LandLine

Map date: 2003

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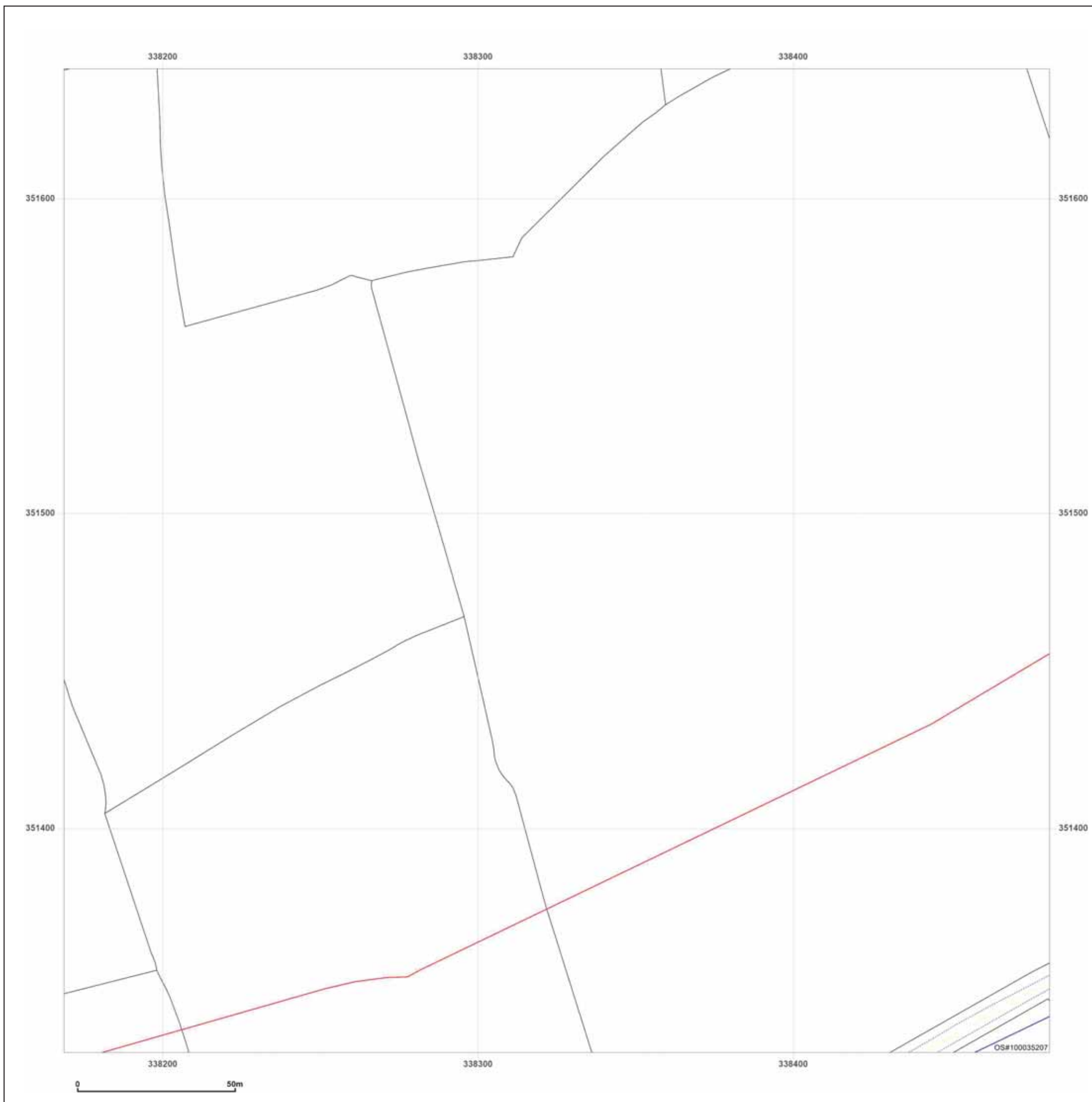


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_Landline_3_1
Grid Ref: 338625, 350885

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



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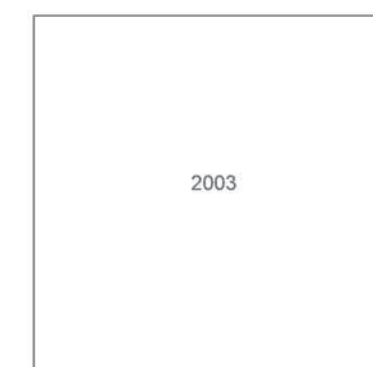
Client Ref: 1779_TE1624
Report Ref: GS-8287502_Landline_3_2
Grid Ref: 338625, 351185

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

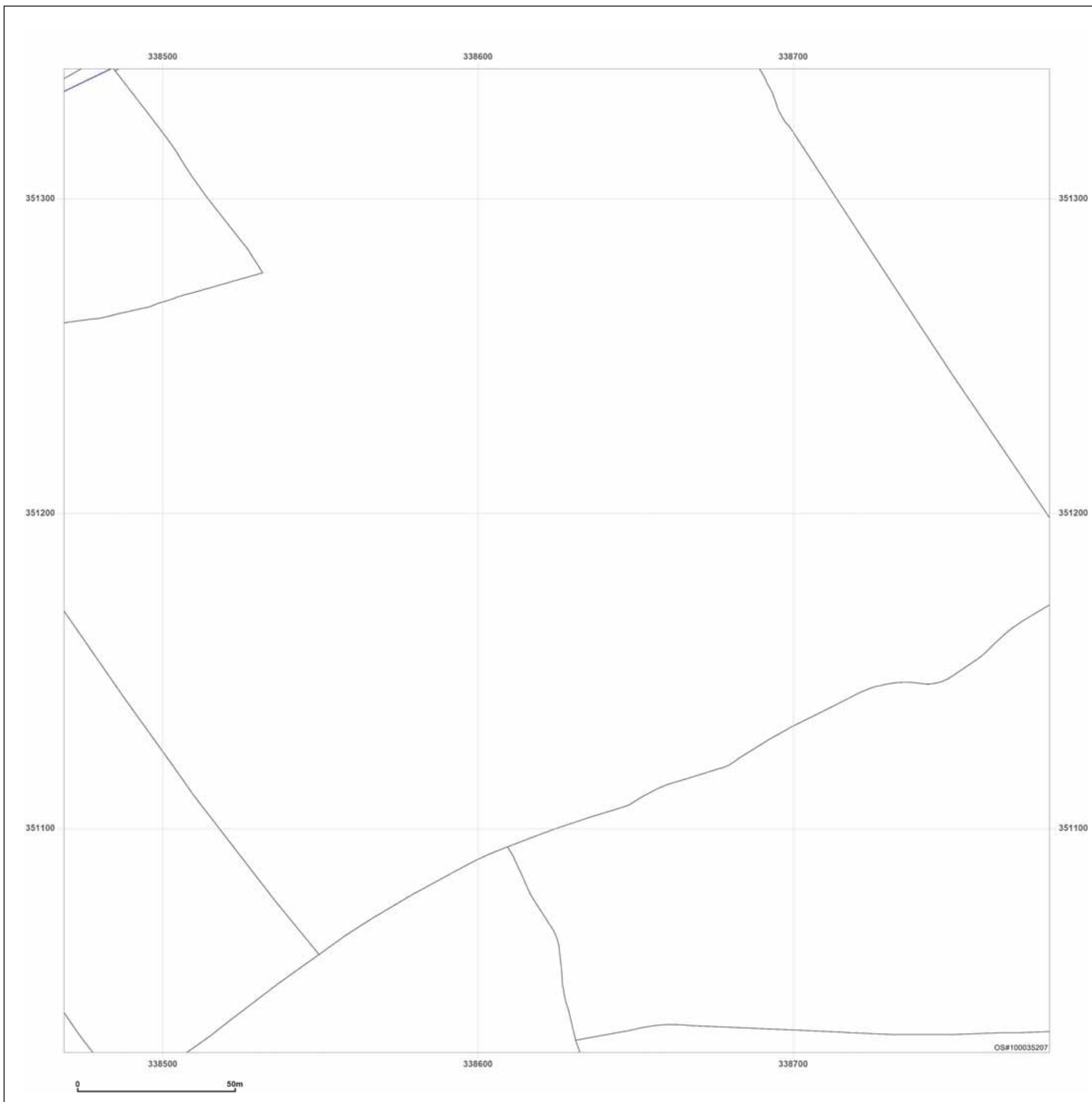


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_Landline_4_1
Grid Ref: 338925, 350885

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



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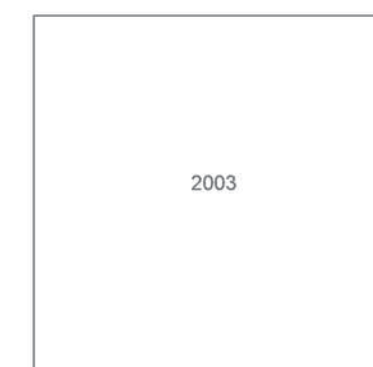
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Report Ref: GS-8287502_Landline_4_2
Grid Ref: 338925, 351185

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

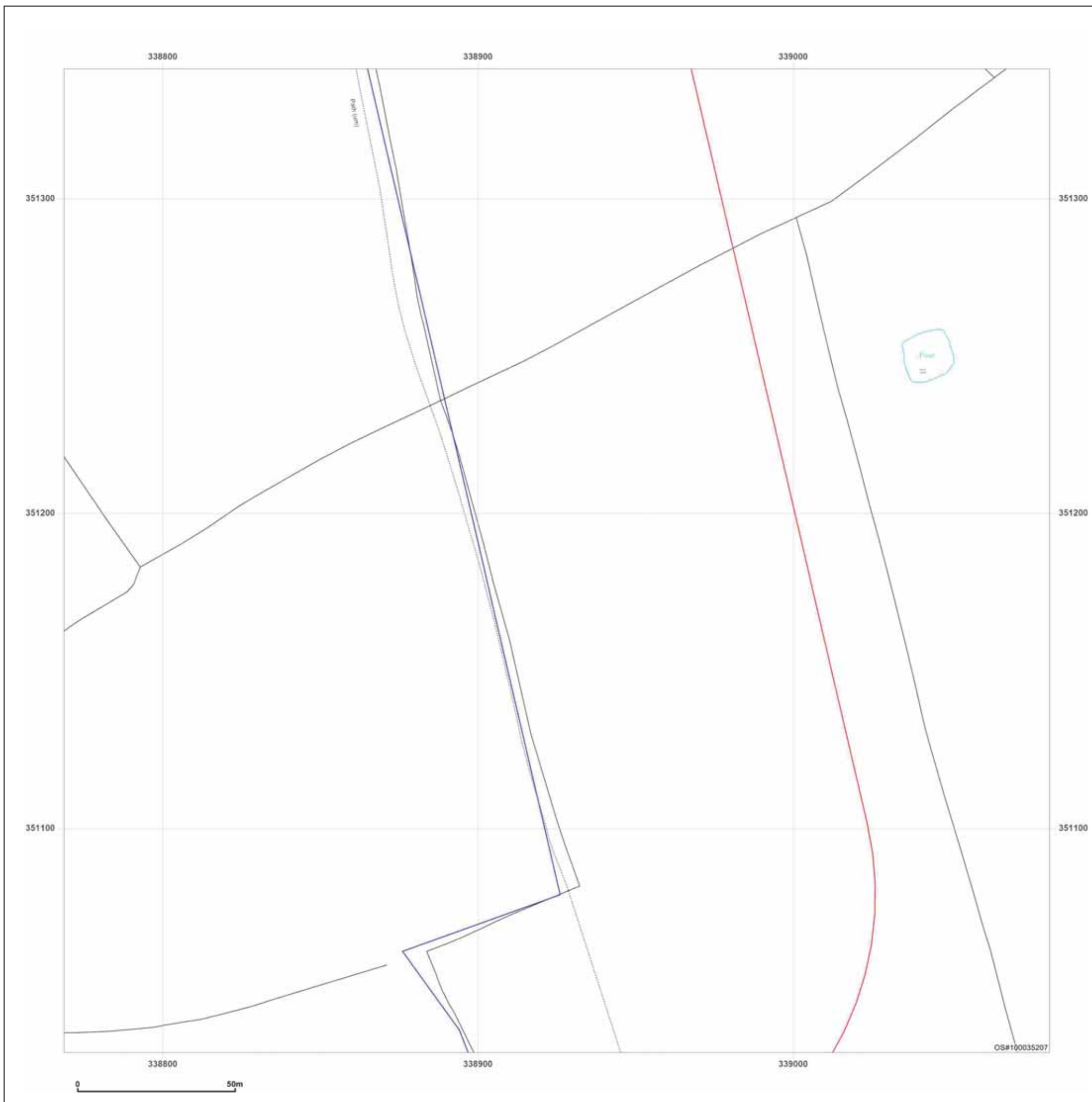


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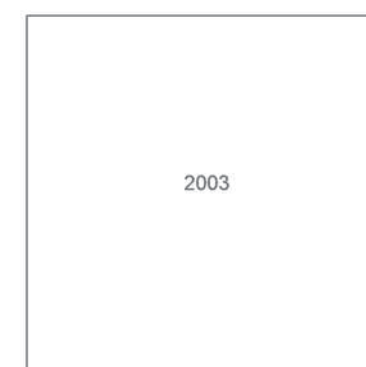
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Report Ref: GS-8287502_Landline_4_3
Grid Ref: 338925, 351485

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

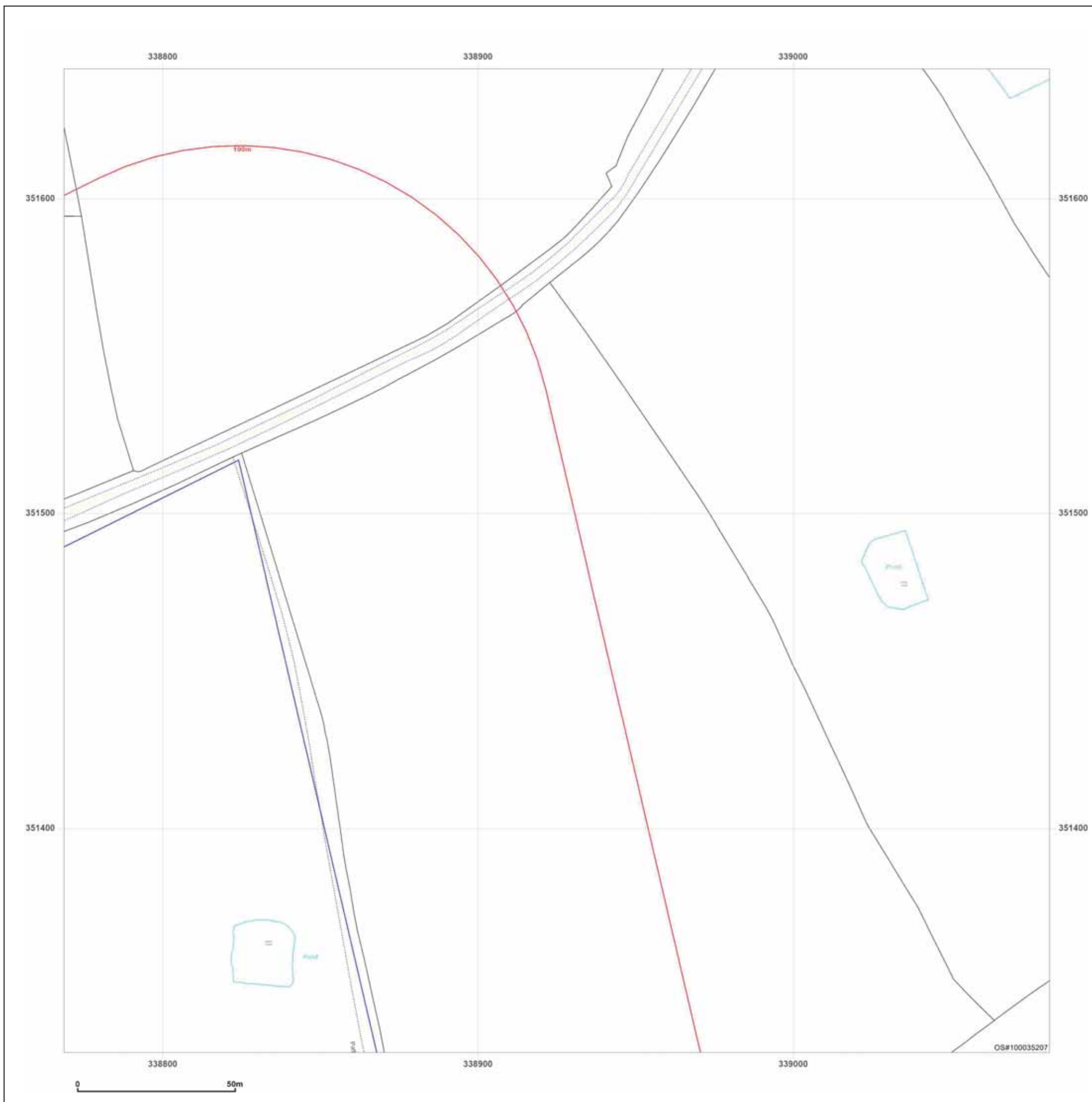


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: County Series

Map date: 1873

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1873
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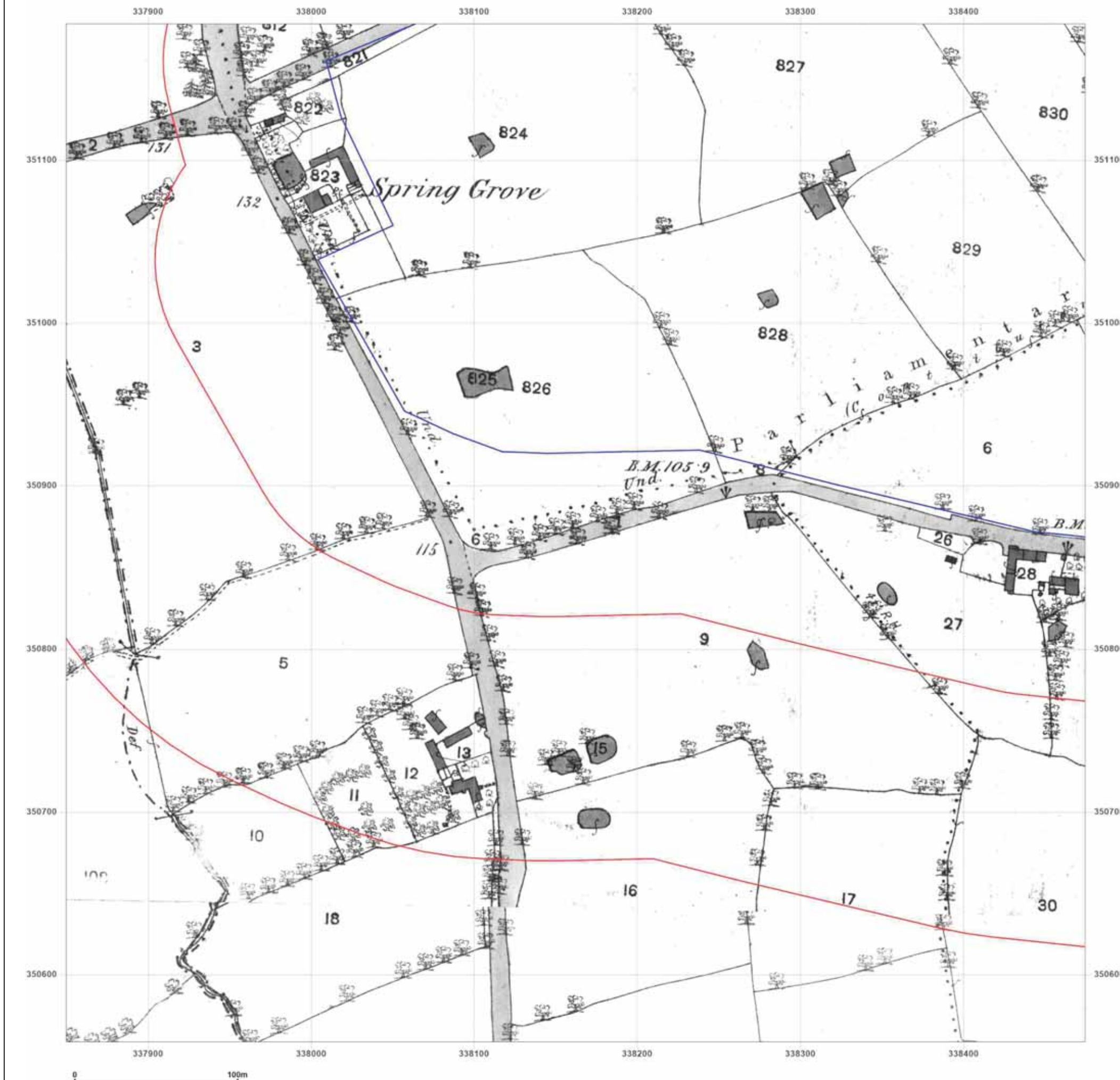


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: County Series

Map date: 1899

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1899
Edition N/A
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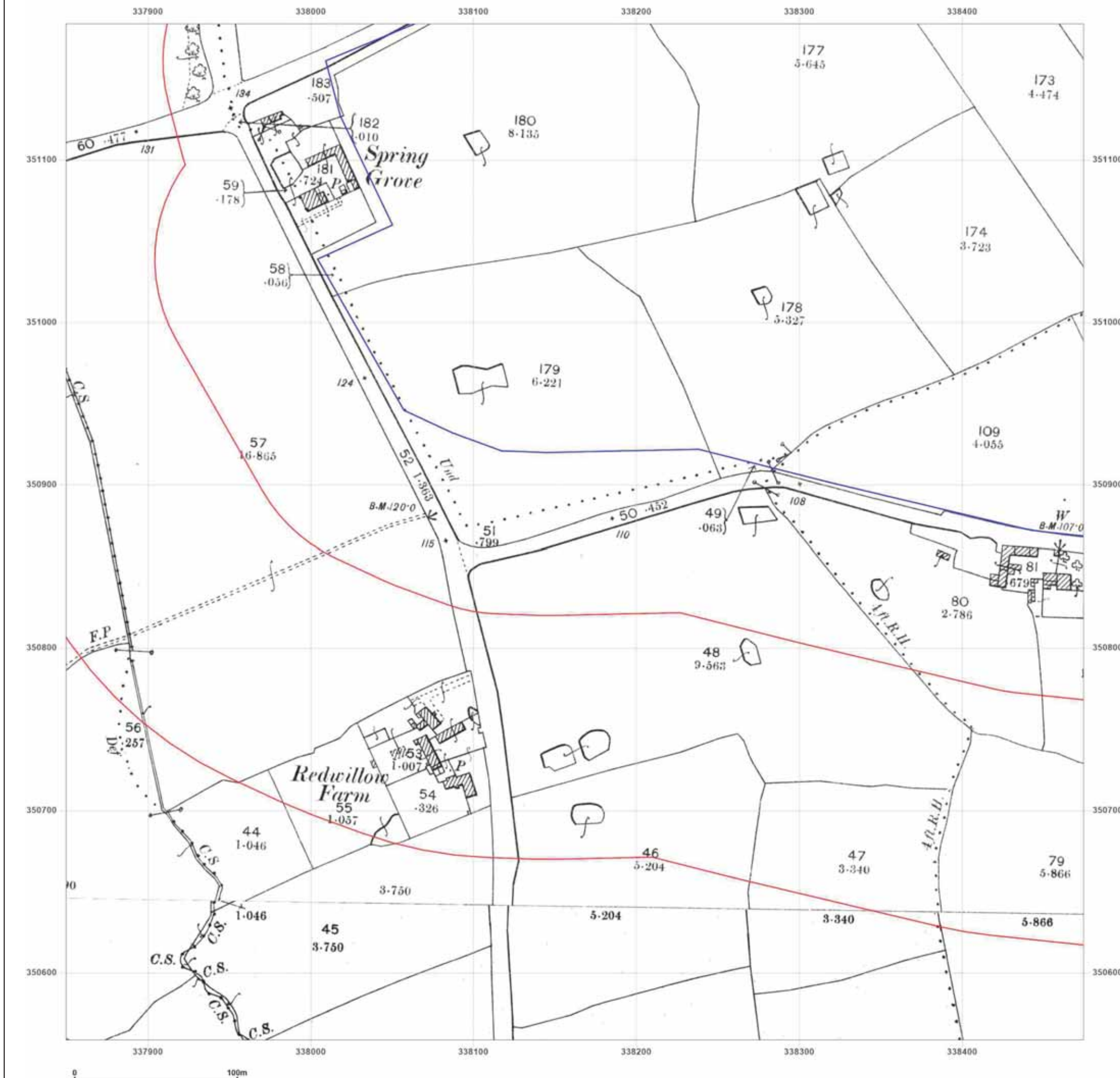


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: County Series

Map date: 1912

Scale: 1:2,500

Printed at: 1:2,500



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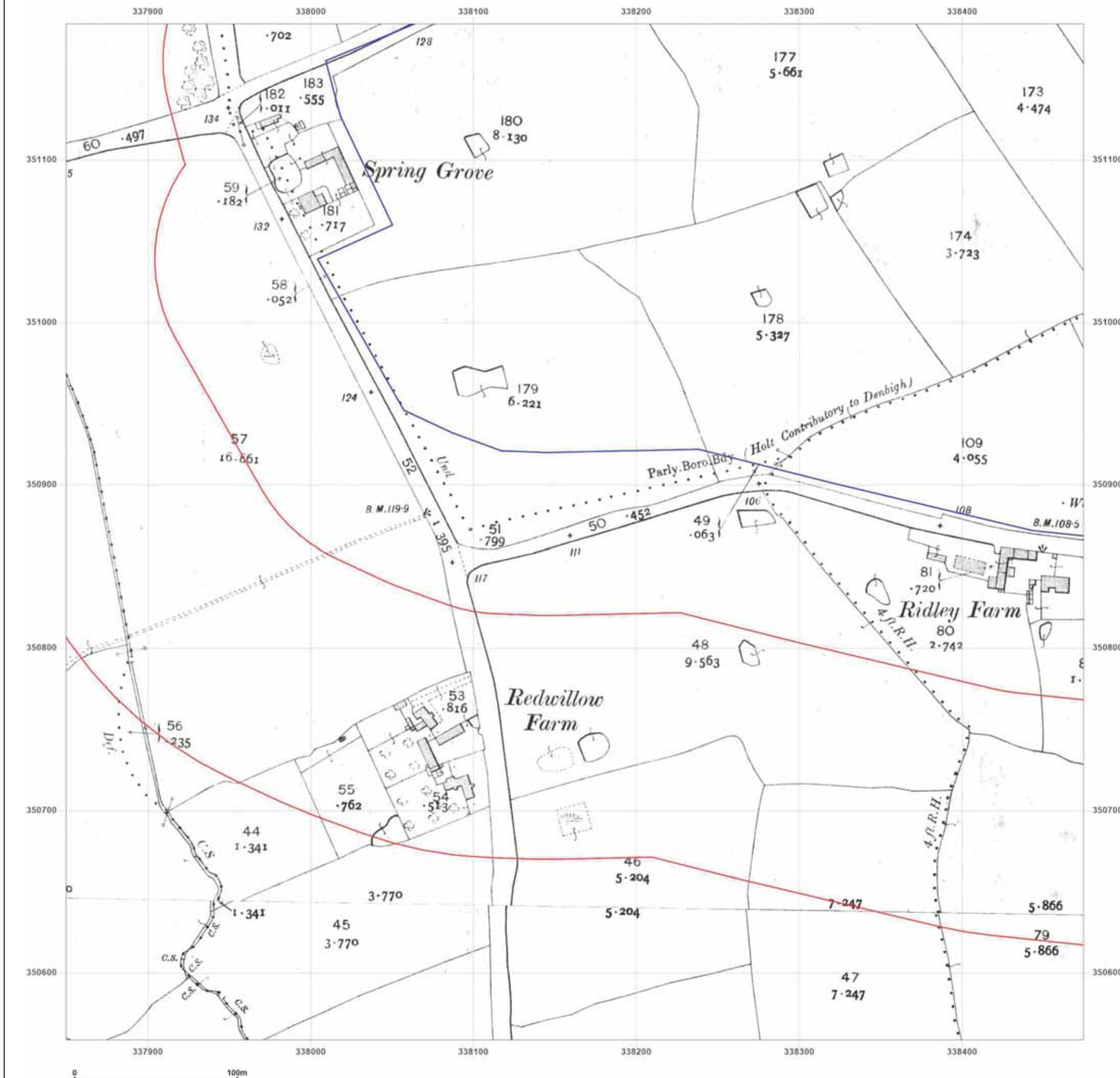


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1960-1962

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1962
Edition N/A
Copyright 1964
Levelled 1959

Surveyed 1960
Revised 1960
Edition N/A
Copyright 1961
Levelled 1950

Surveyed 1960
Revised 1960
Edition N/A
Copyright 1961
Levelled 1950

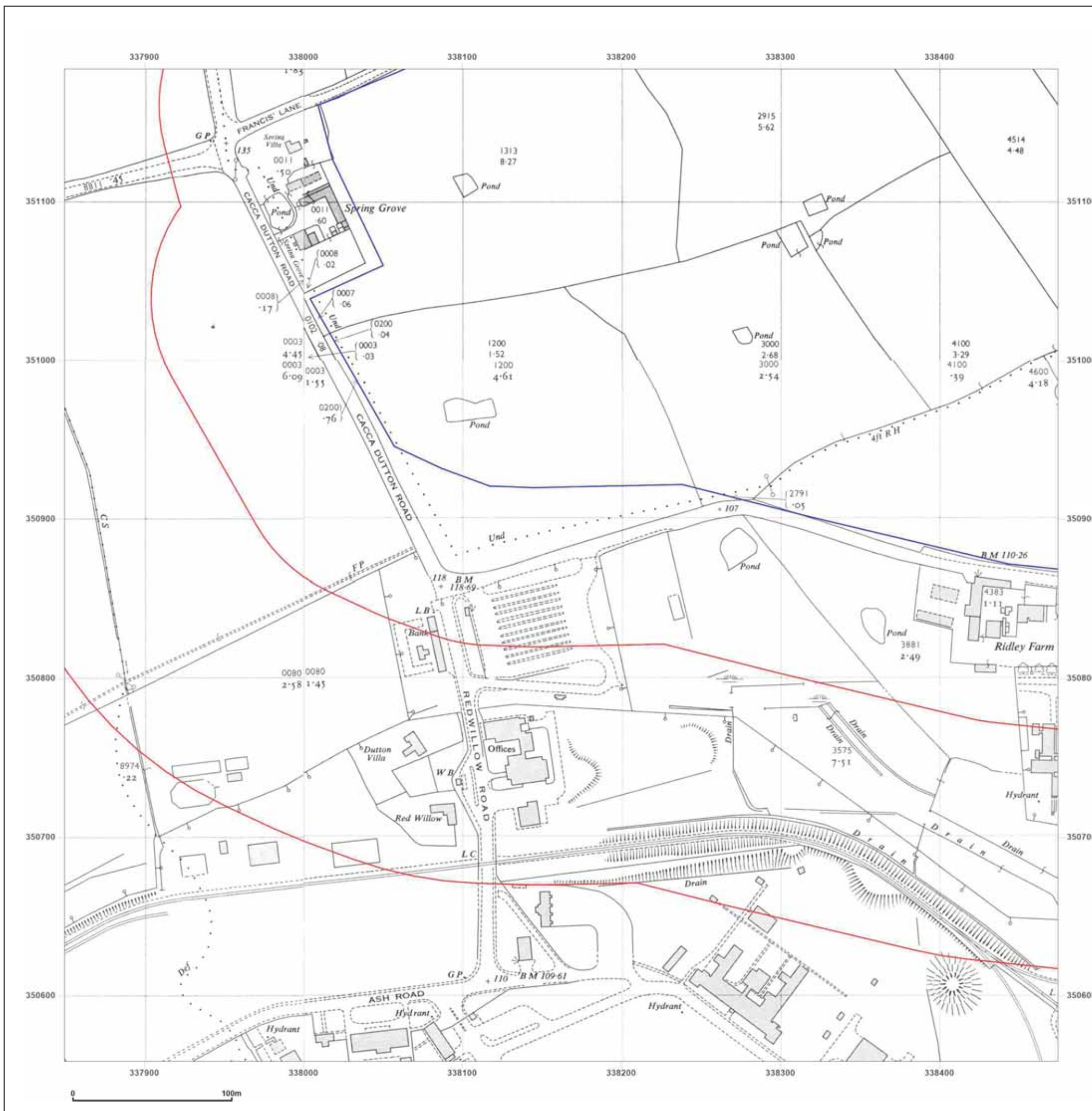


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1961-1964

Scale: 1:2,500

Printed at: 1:2,500



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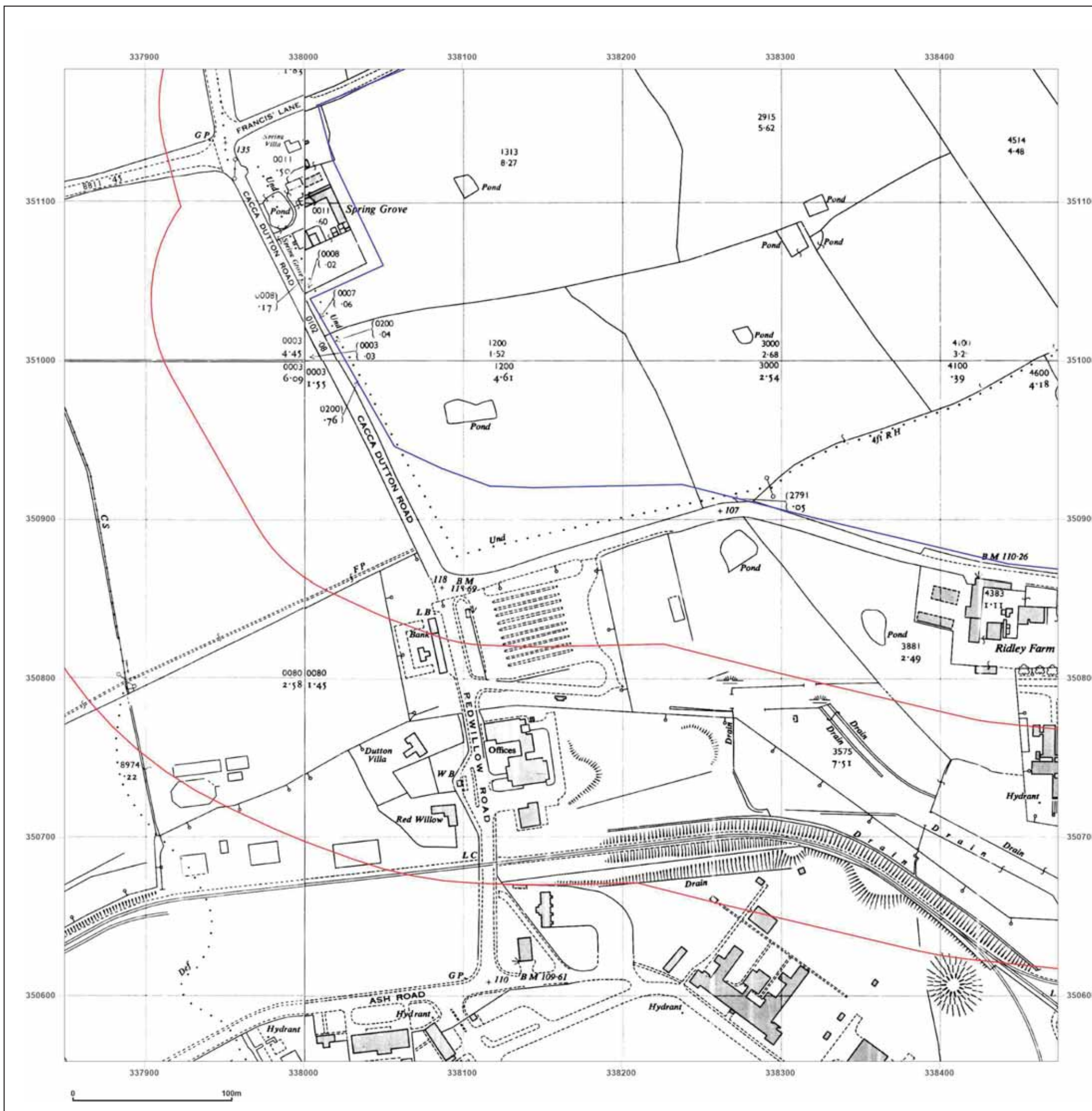


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1974-1975

Scale: 1:2,500

Printed at: 1:2,500



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Revised N/A
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1974-1976

Scale: 1:2,500

Printed at: 1:2,500



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Surveyed 1974
Revised 1974
Edition N/A
Copyright 1974
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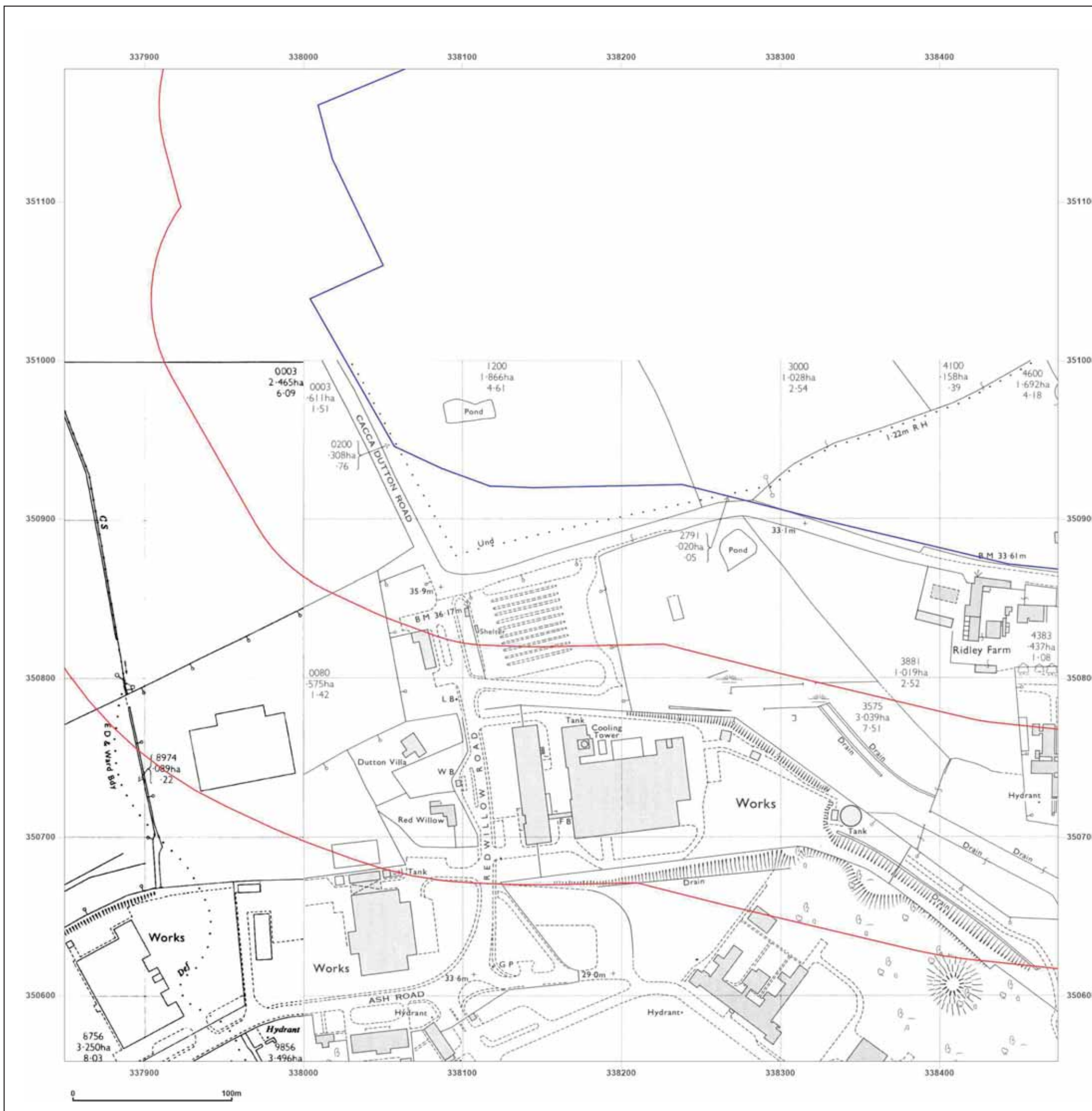


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1982

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1988-1991

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 1959
Revised 1988
Edition N/A
Copyright 1988
Levelled 1959

Surveyed 1959
Revised 1989
Edition N/A
Copyright 1989
Levelled 1959

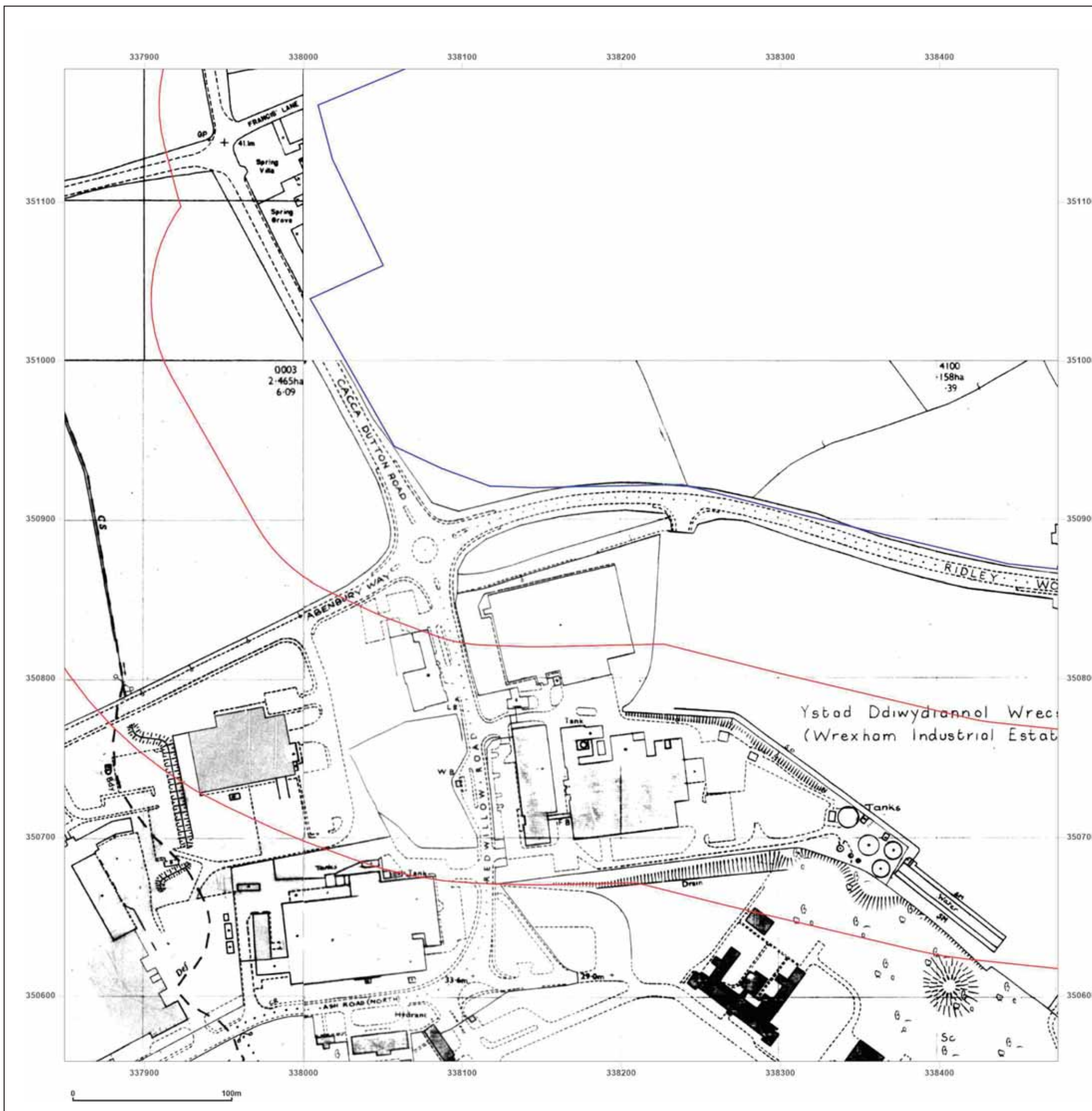


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1989-1991

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1989
Levelled 1959

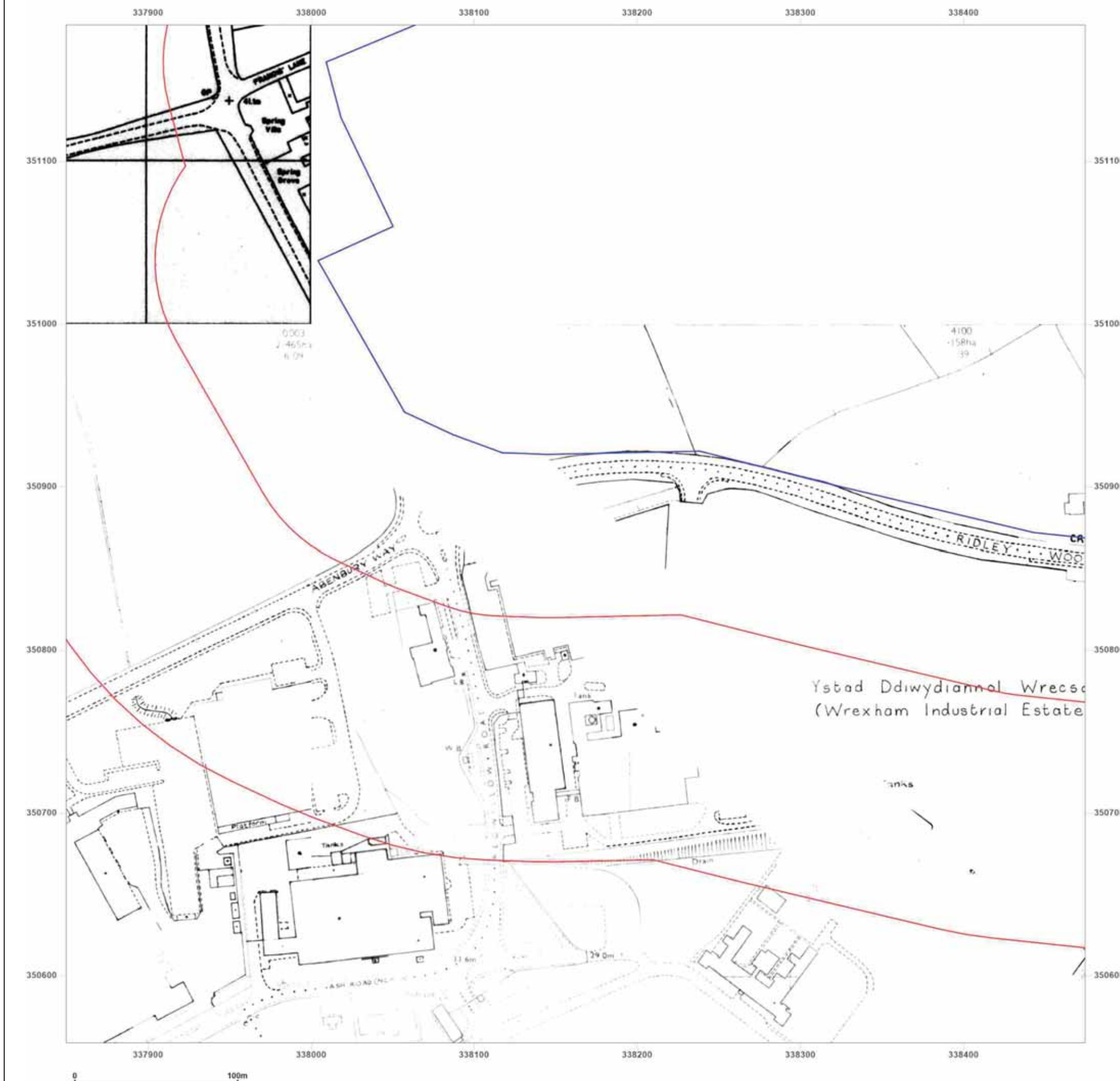


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1990-1992

Scale: 1:2,500

Printed at: 1:2,500



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Revised N/A
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Surveyed 1990
Revised 1990
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Surveyed N/A
Revised N/A
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Copyright 1990
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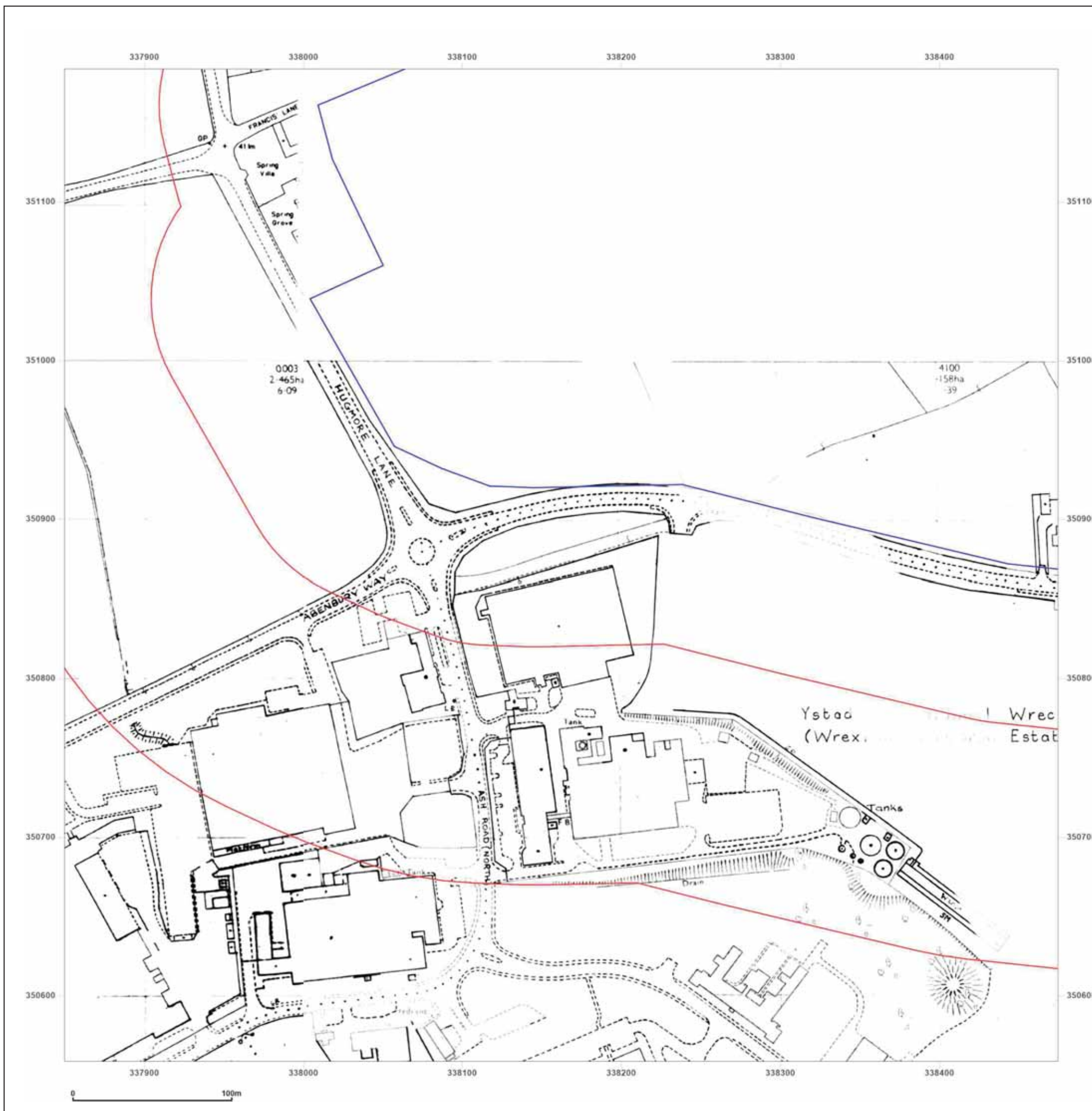


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1990-1992

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1990
Levelled 1959

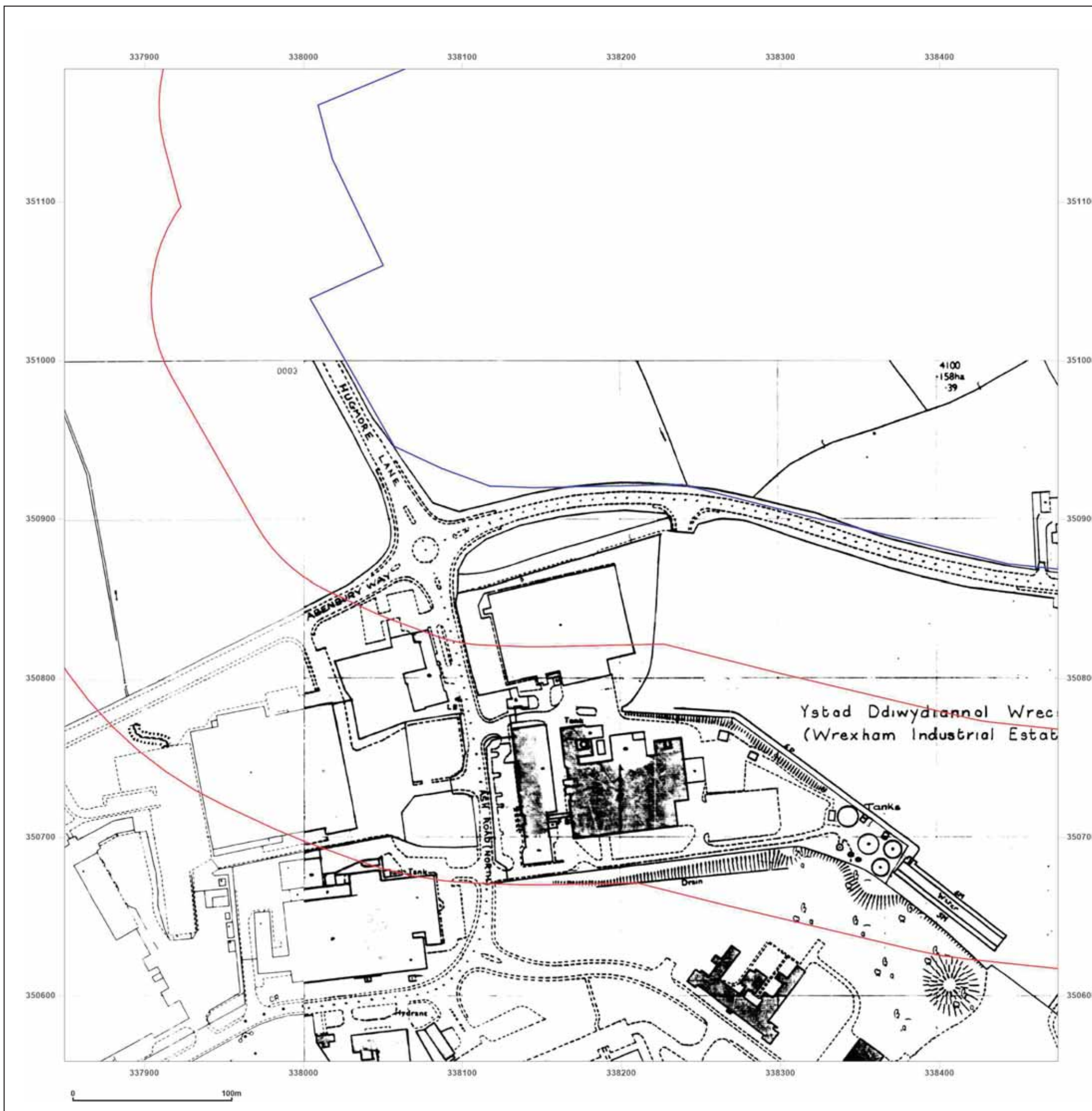


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1987-1992

Scale: 1:2,500

Printed at: 1:2,500



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Surveyed 1992
Revised N/A
Edition N/A
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Surveyed N/A
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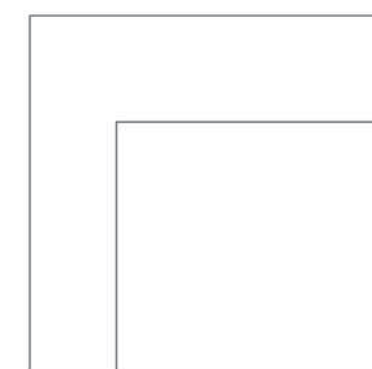
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Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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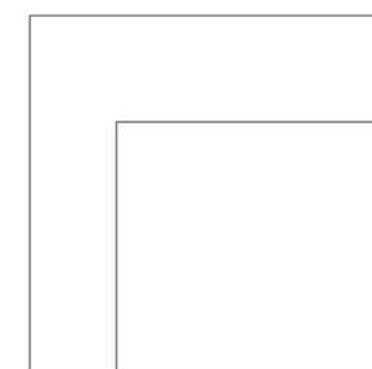
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Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1991-1994

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed 1991
Revised 1991
Edition N/A
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Site Details:

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ESTATE, WREXHAM, LL13 9UT

Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1992-1994

Scale: 1:2,500

Printed at: 1:2,500



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

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

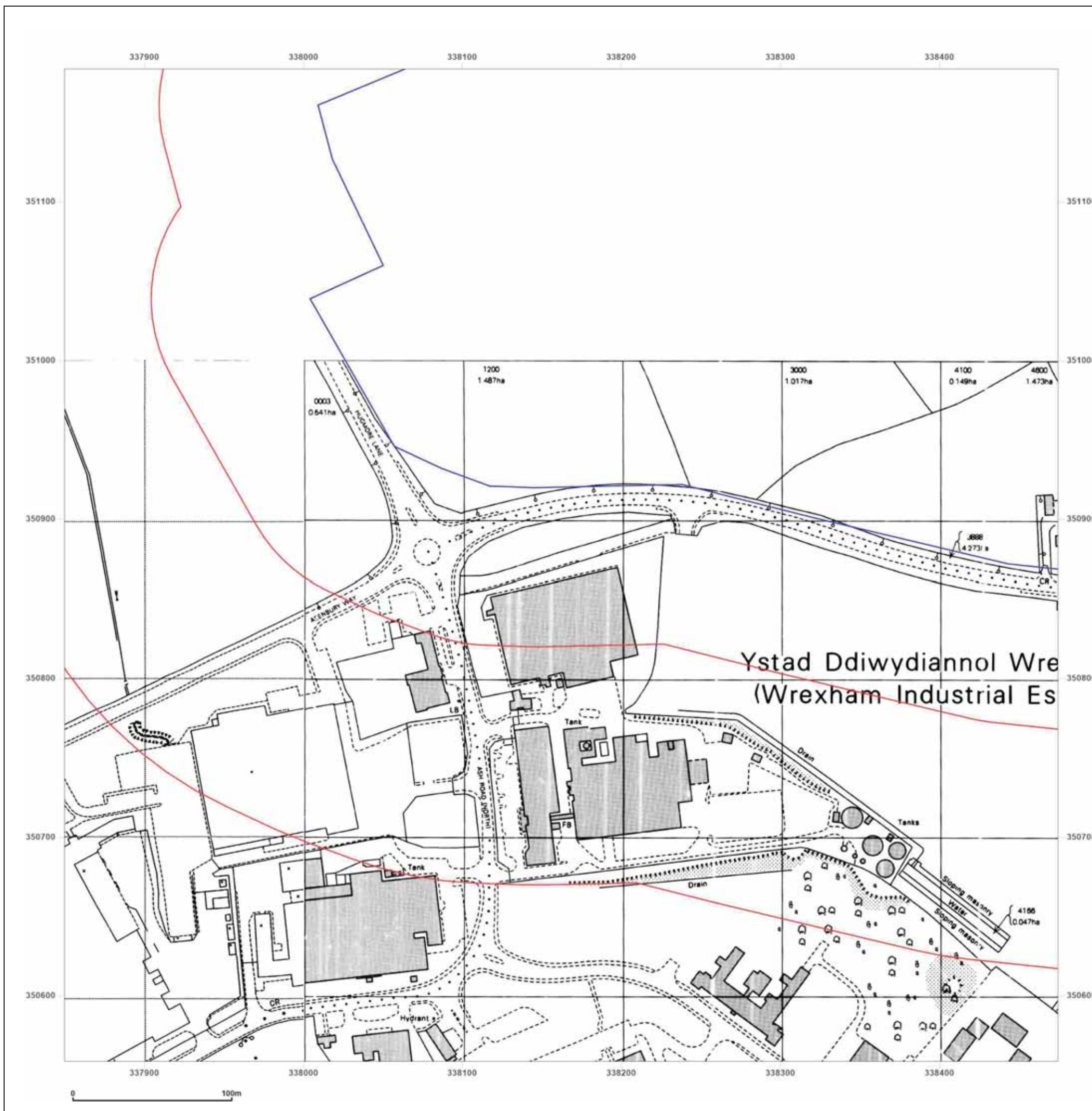


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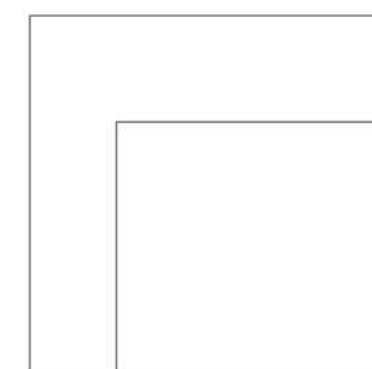
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Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
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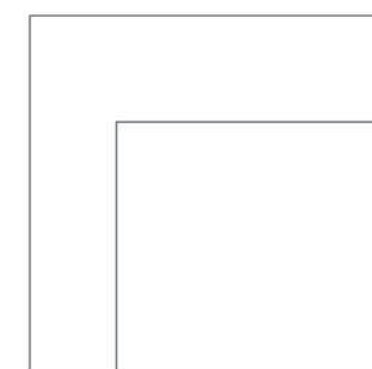
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Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



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Site Details:

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ESTATE, WREXHAM, LL13 9UT

Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1992-1995

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1993-1995

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
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Surveyed N/A
Revised 1993
Edition N/A
Copyright 1990
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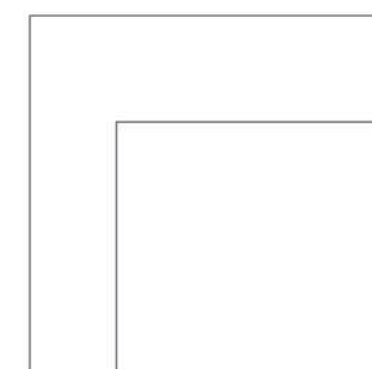
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Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1995

Scale: 1:2,500

Printed at: 1:2,500



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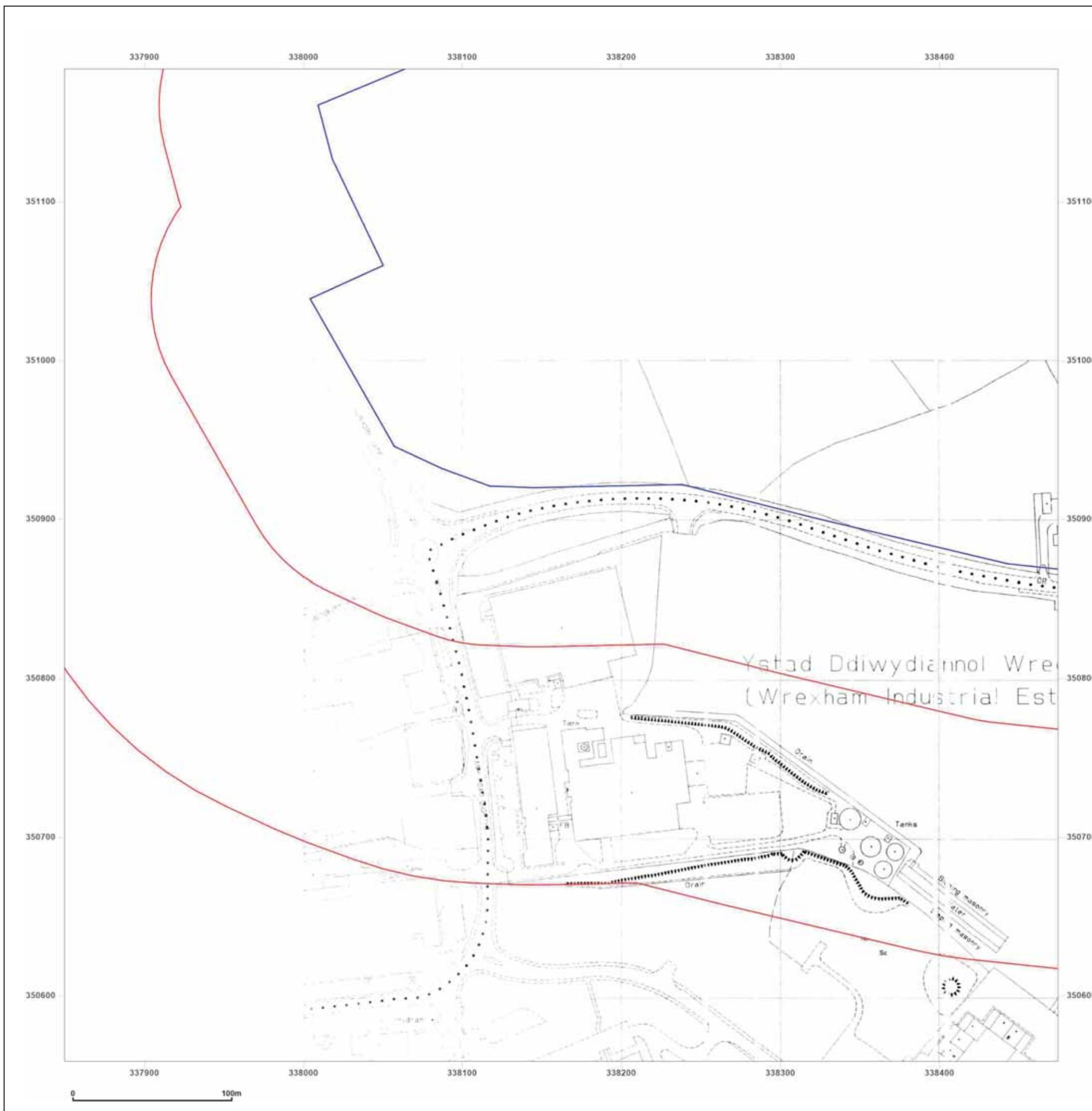


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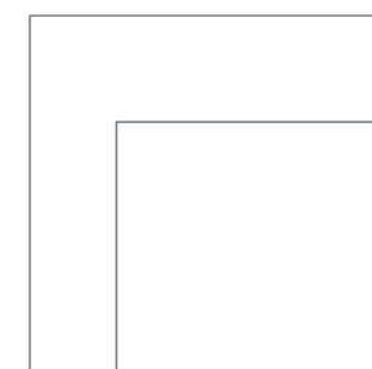
Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_1
Grid Ref: 338162, 350871

Map Name: National Grid

Map date: 1995

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1995
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_2
Grid Ref: 338162, 351496

Map Name: County Series

Map date: 1873

Scale: 1:2,500

Printed at: 1:2,500



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

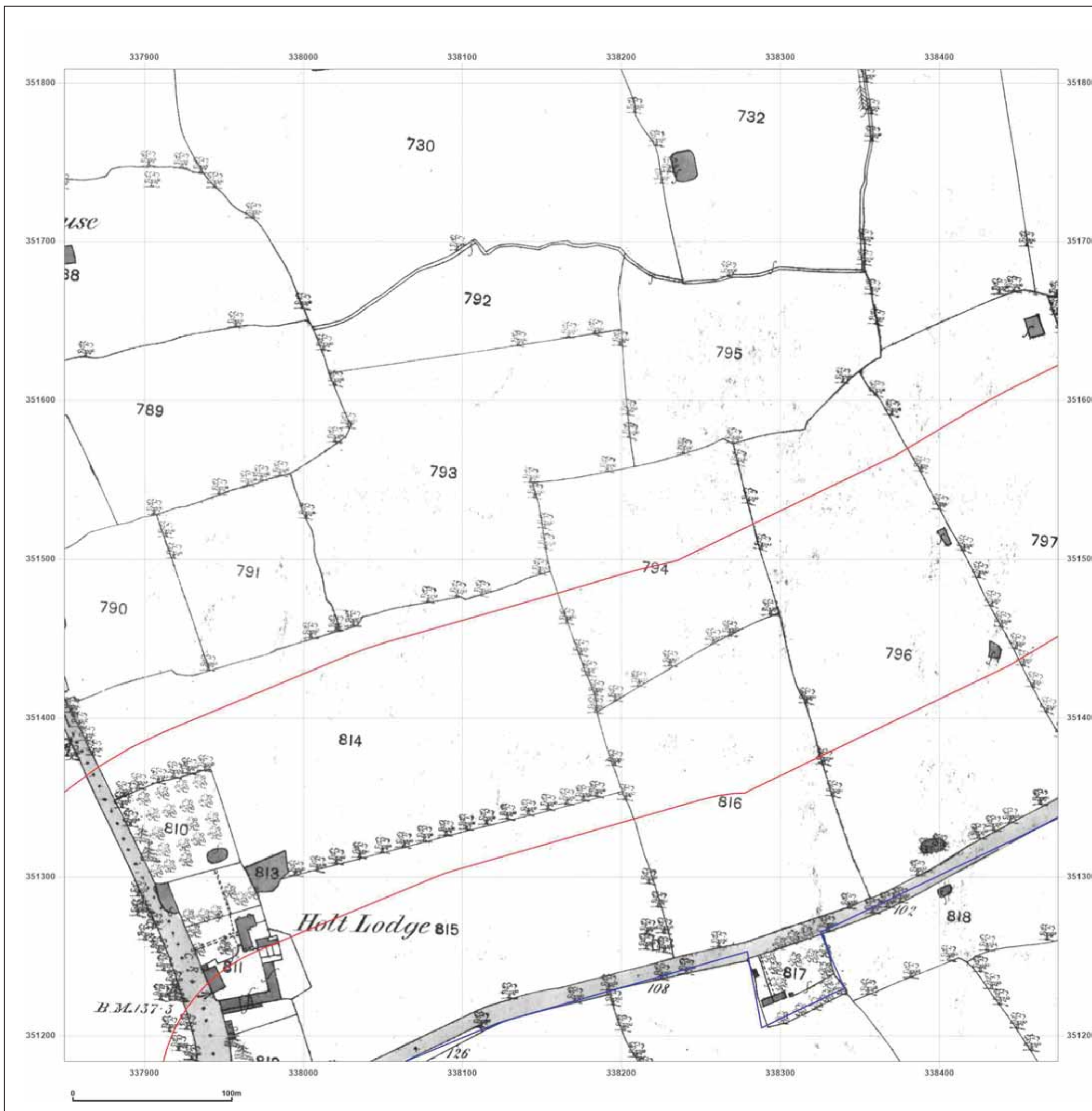


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_2
Grid Ref: 338162, 351496

Map Name: County Series

Map date: 1899

Scale: 1:2,500

Printed at: 1:2,500



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

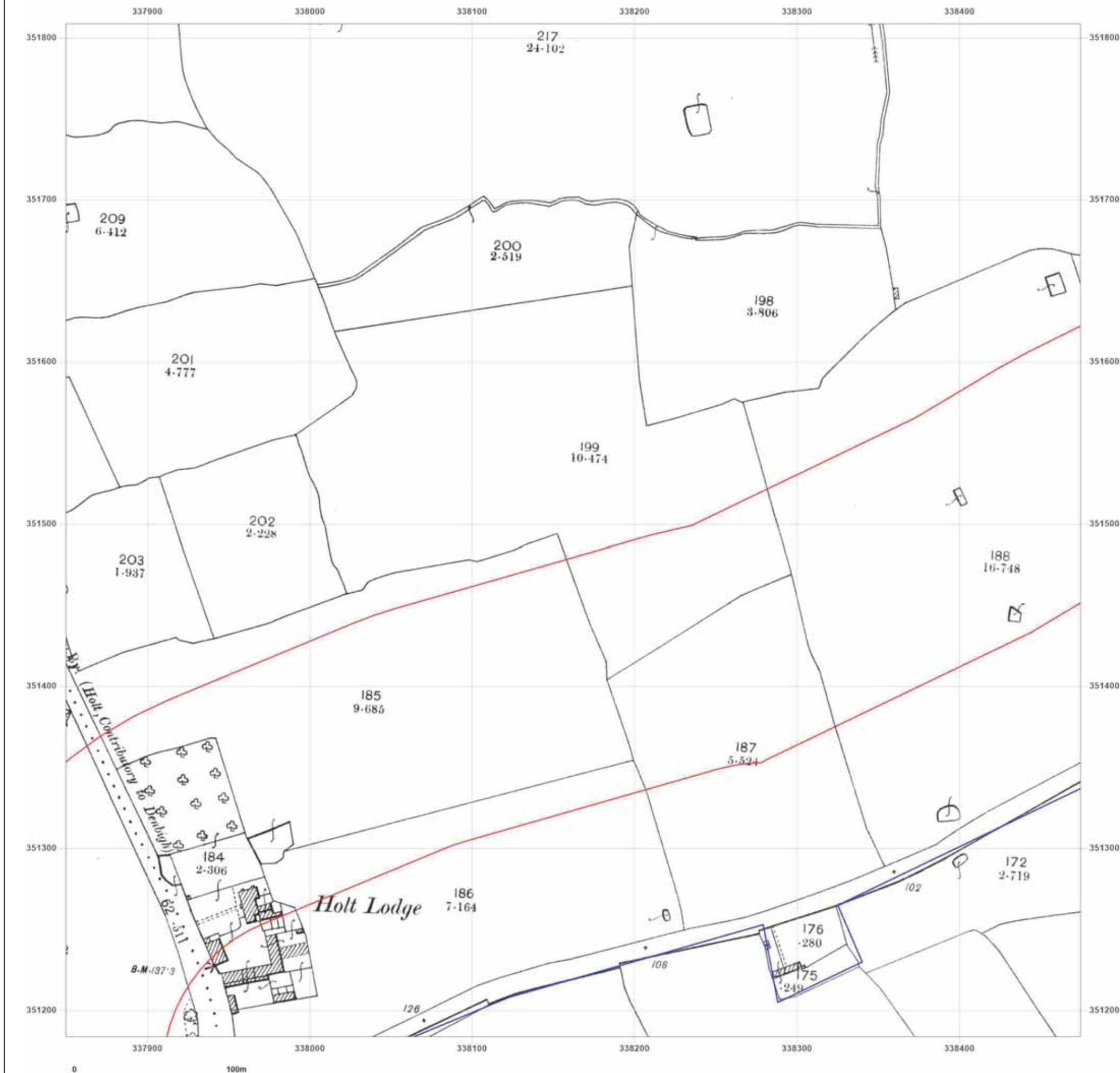


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_2
Grid Ref: 338162, 351496

Map Name: County Series

Map date: 1912

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1912
Revised 1912
Edition N/A
Copyright N/A
Levelled N/A

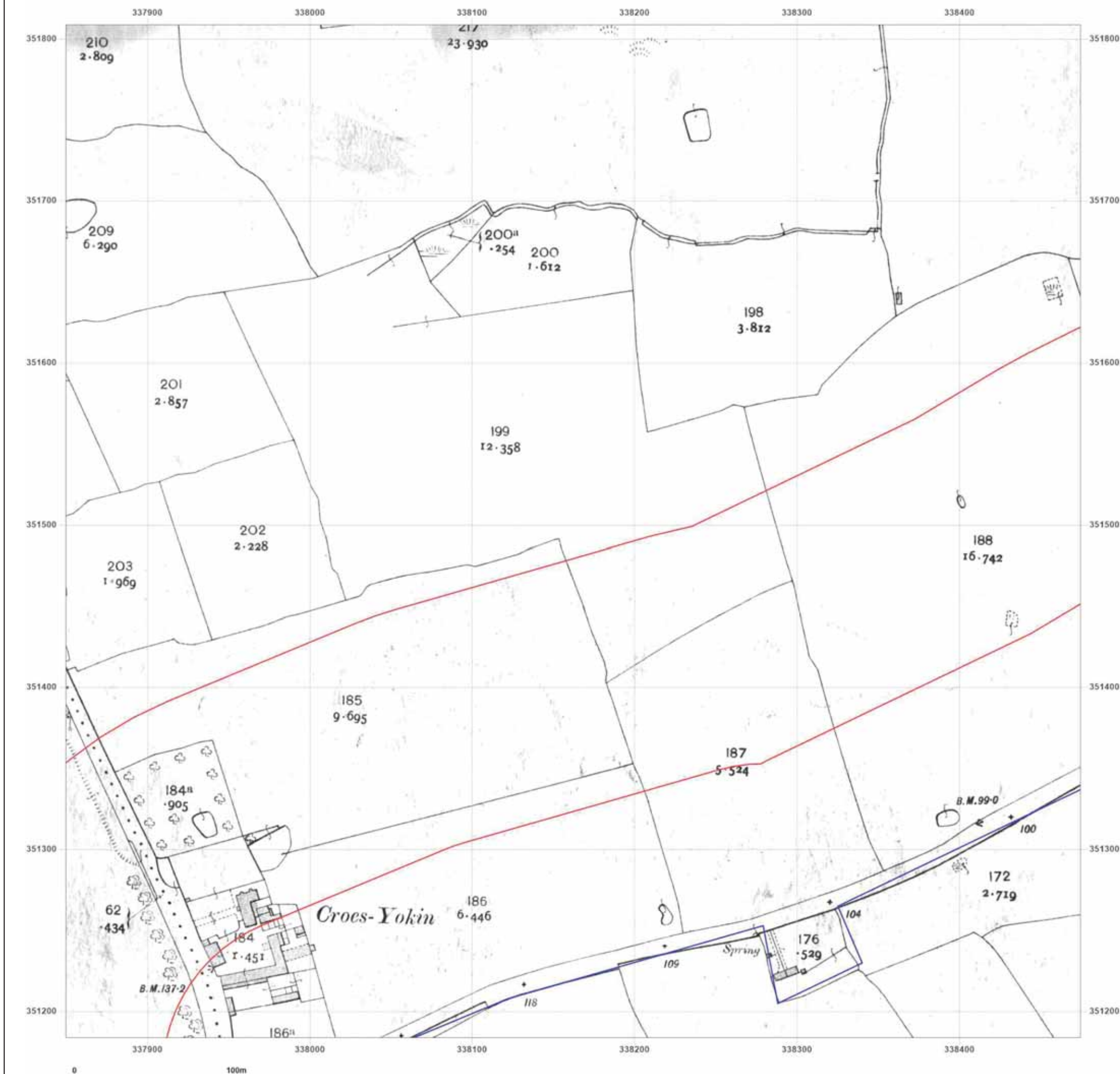


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_2
Grid Ref: 338162, 351496

Map Name: National Grid

Map date: 1961-1962

Scale: 1:2,500

Printed at: 1:2,500



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Surveyed 1962
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_2
Grid Ref: 338162, 351496

Map Name: National Grid

Map date: 1962-1964

Scale: 1:2,500

Printed at: 1:2,500



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

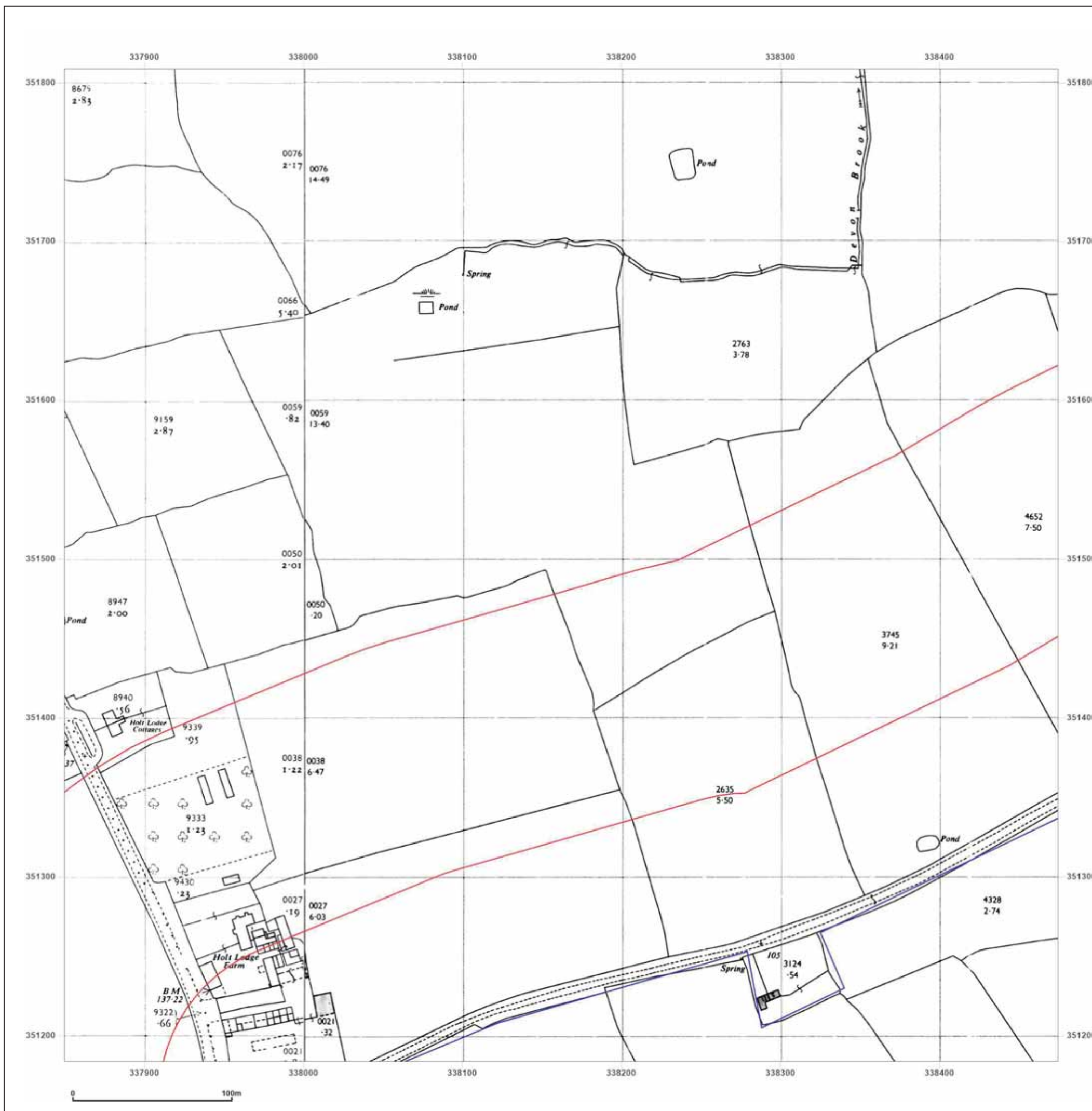


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_1_2
Grid Ref: 338162, 351496

Map Name: National Grid

Map date: 1991-1992

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: County Series

Map date: 1873

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed 1873
Revised 1873
Edition N/A
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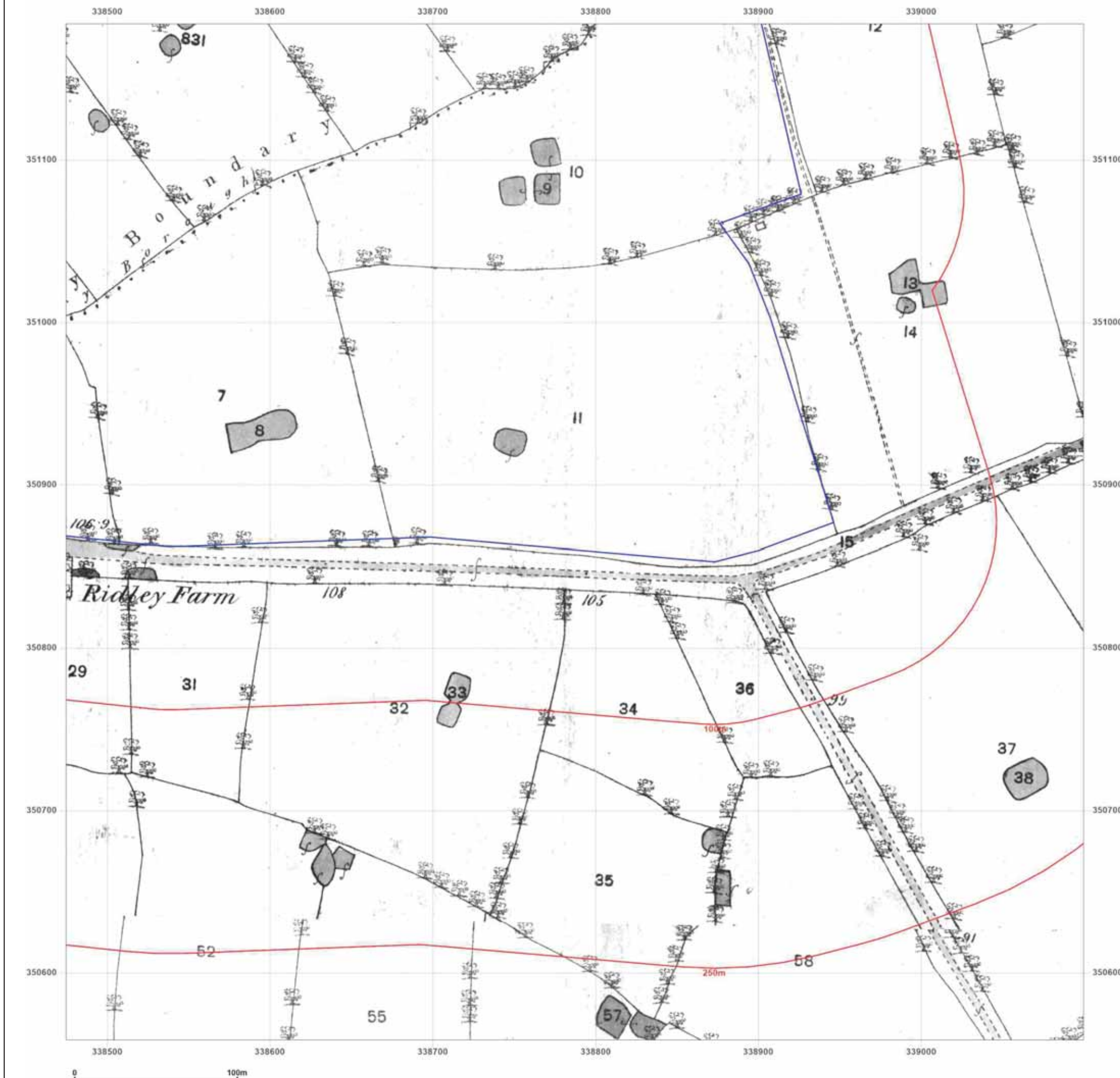


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ESTATE, WREXHAM, LL13 9UT

Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: County Series

Map date: 1899

Scale: 1:2,500

Printed at: 1:2,500



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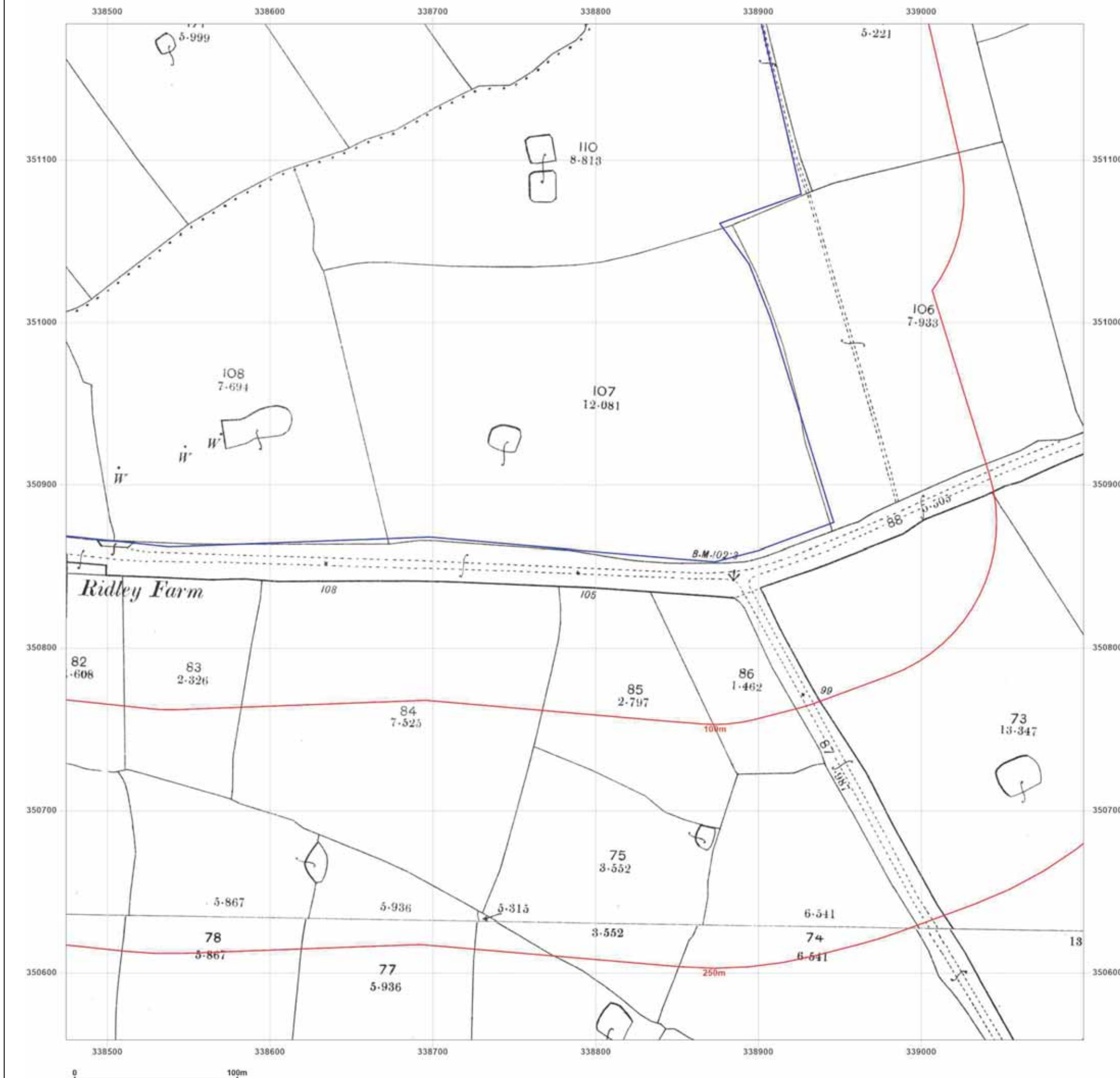


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: County Series

Map date: 1912

Scale: 1:2,500

Printed at: 1:2,500



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Edition N/A
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Surveyed 1912
Revised 1912
Edition N/A
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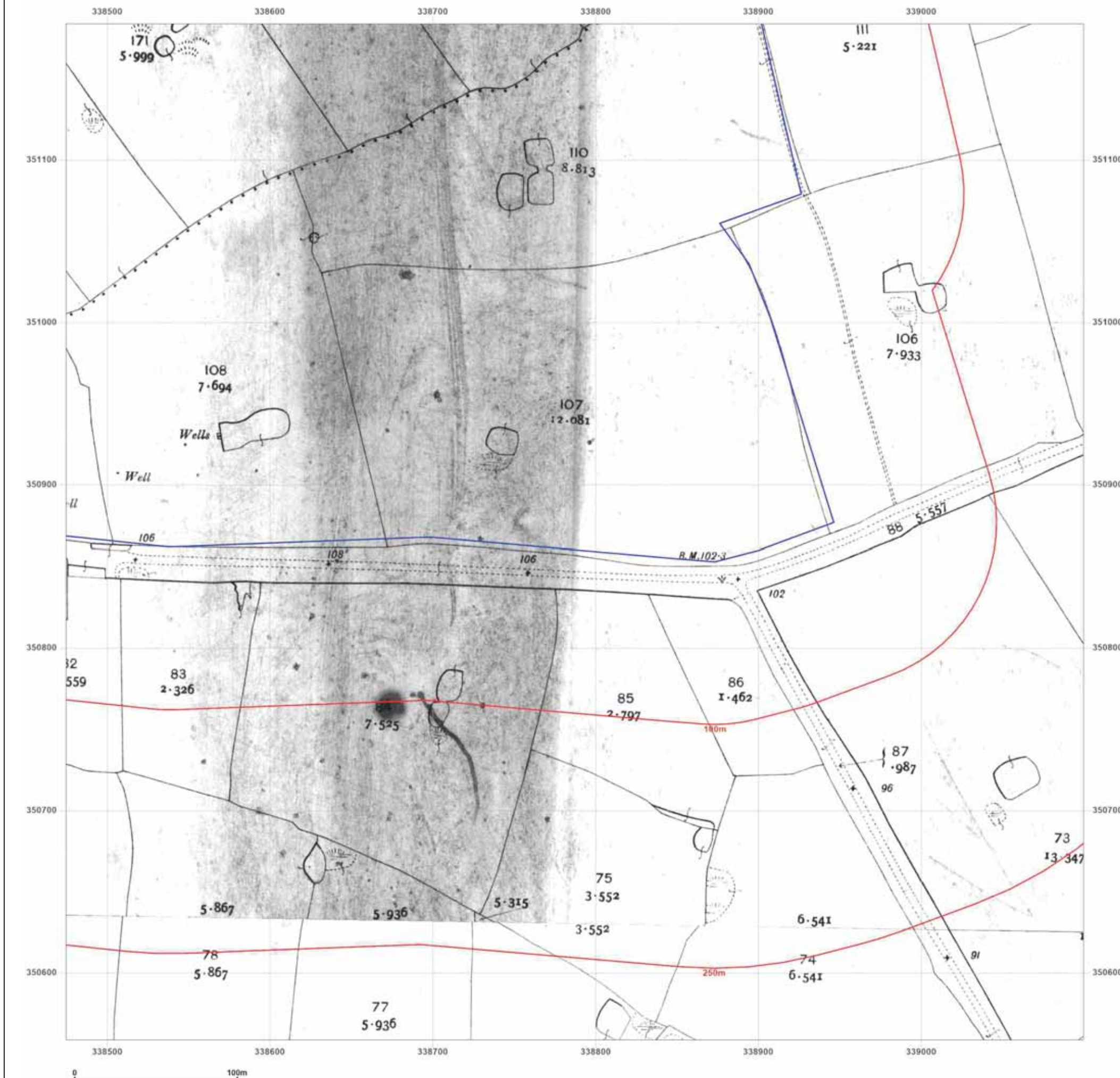


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1960-1962

Scale: 1:2,500

Printed at: 1:2,500



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Edition N/A
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Surveyed 1960
Revised 1960
Edition N/A
Copyright 1961
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1961-1964

Scale: 1:2,500

Printed at: 1:2,500



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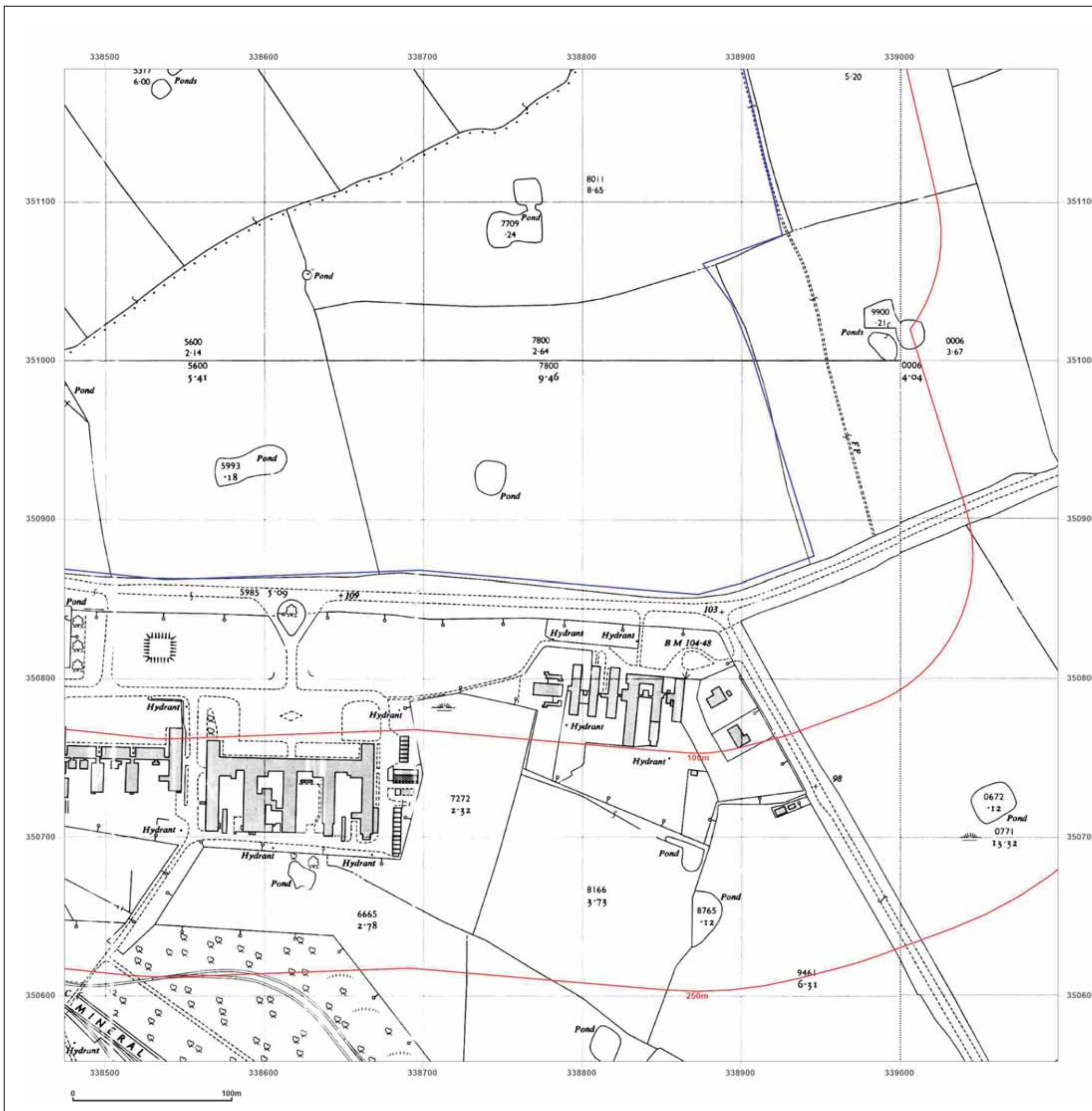


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1974

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1974

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1982

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1959
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1990-1991

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1990
Levelled 1959

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

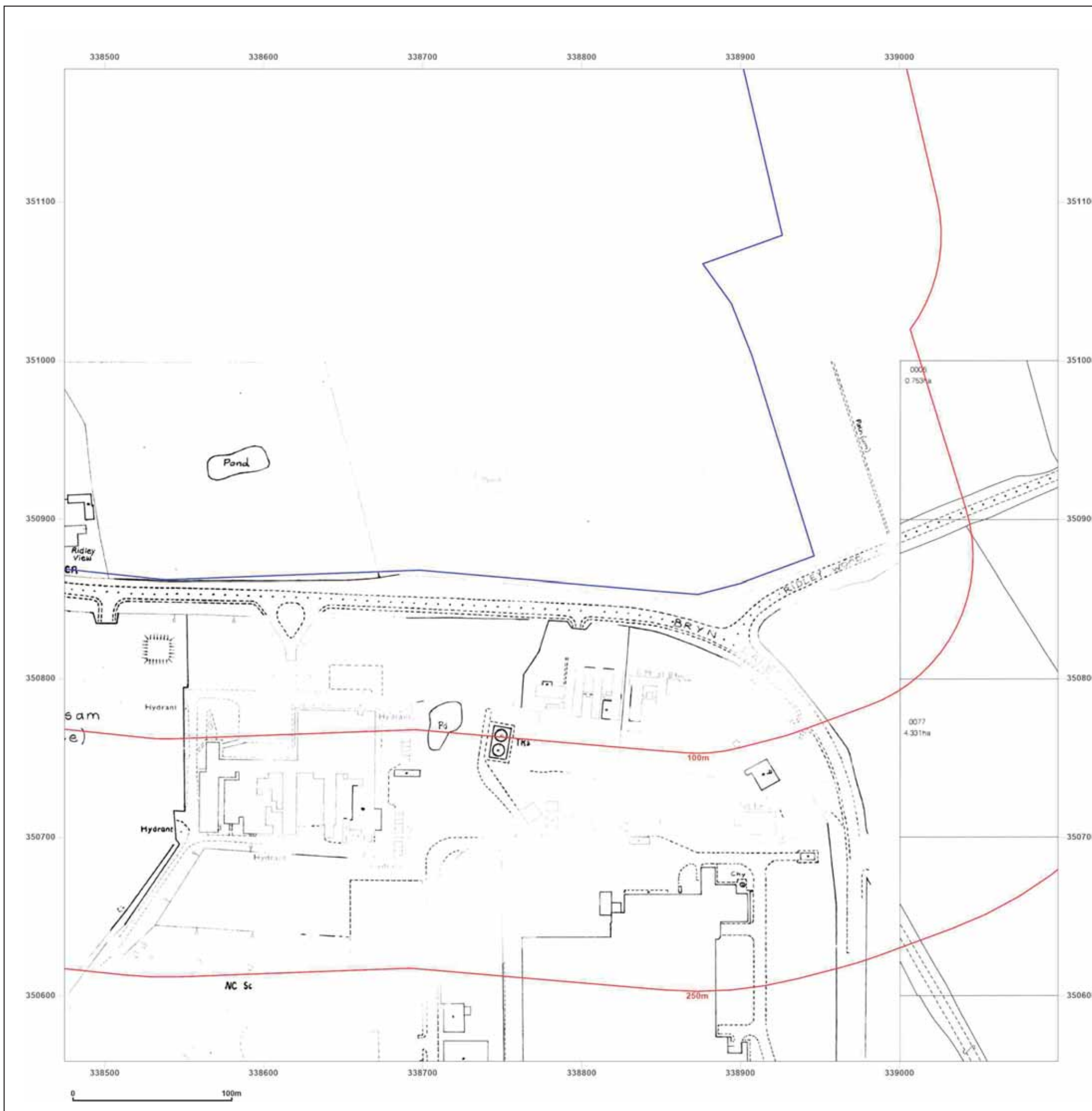


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1990-1992

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1991-1992

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1992

Scale: 1:2,500

Printed at: 1:2,500



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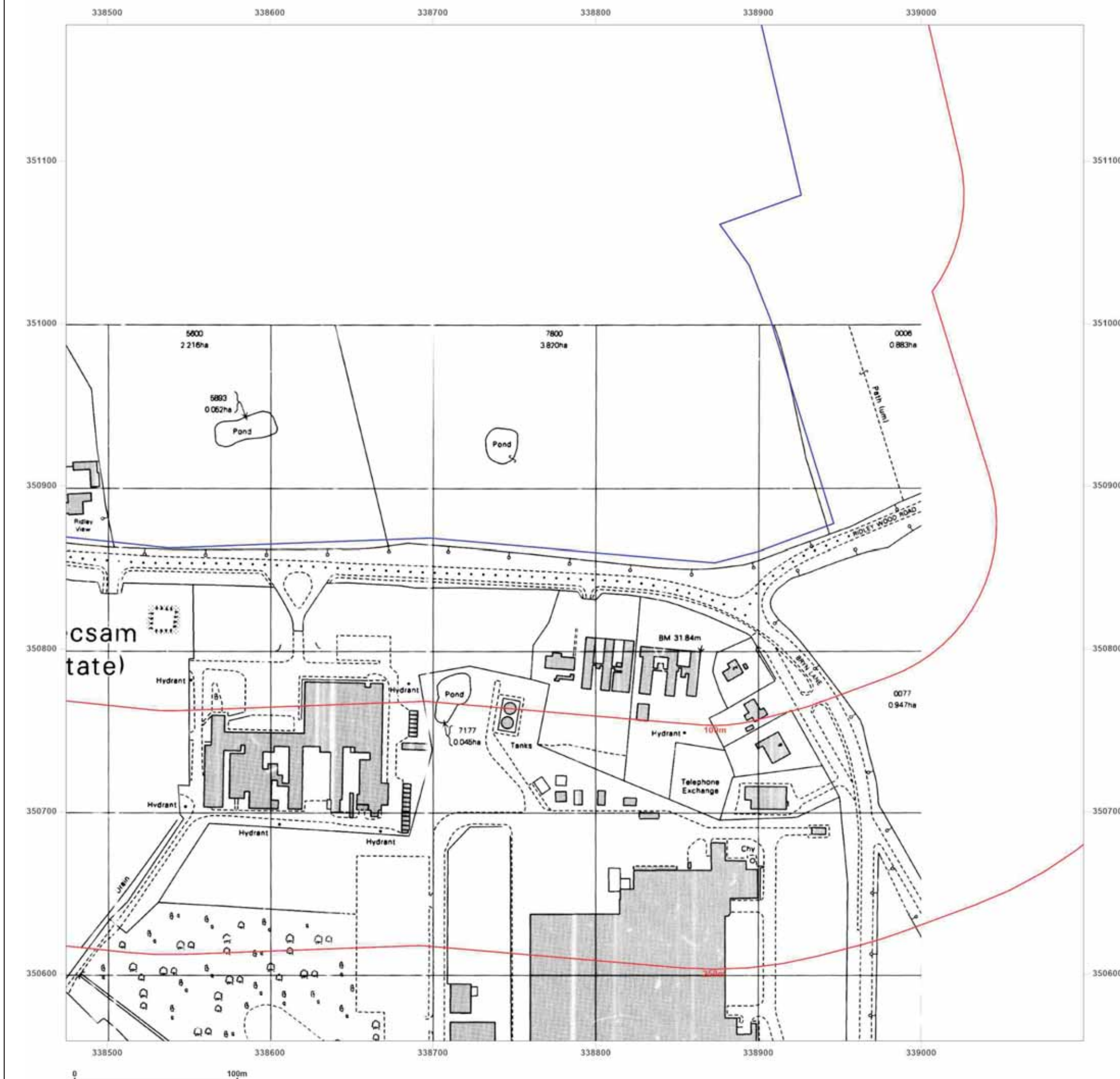


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1992

Scale: 1:2,500

Printed at: 1:2,500



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

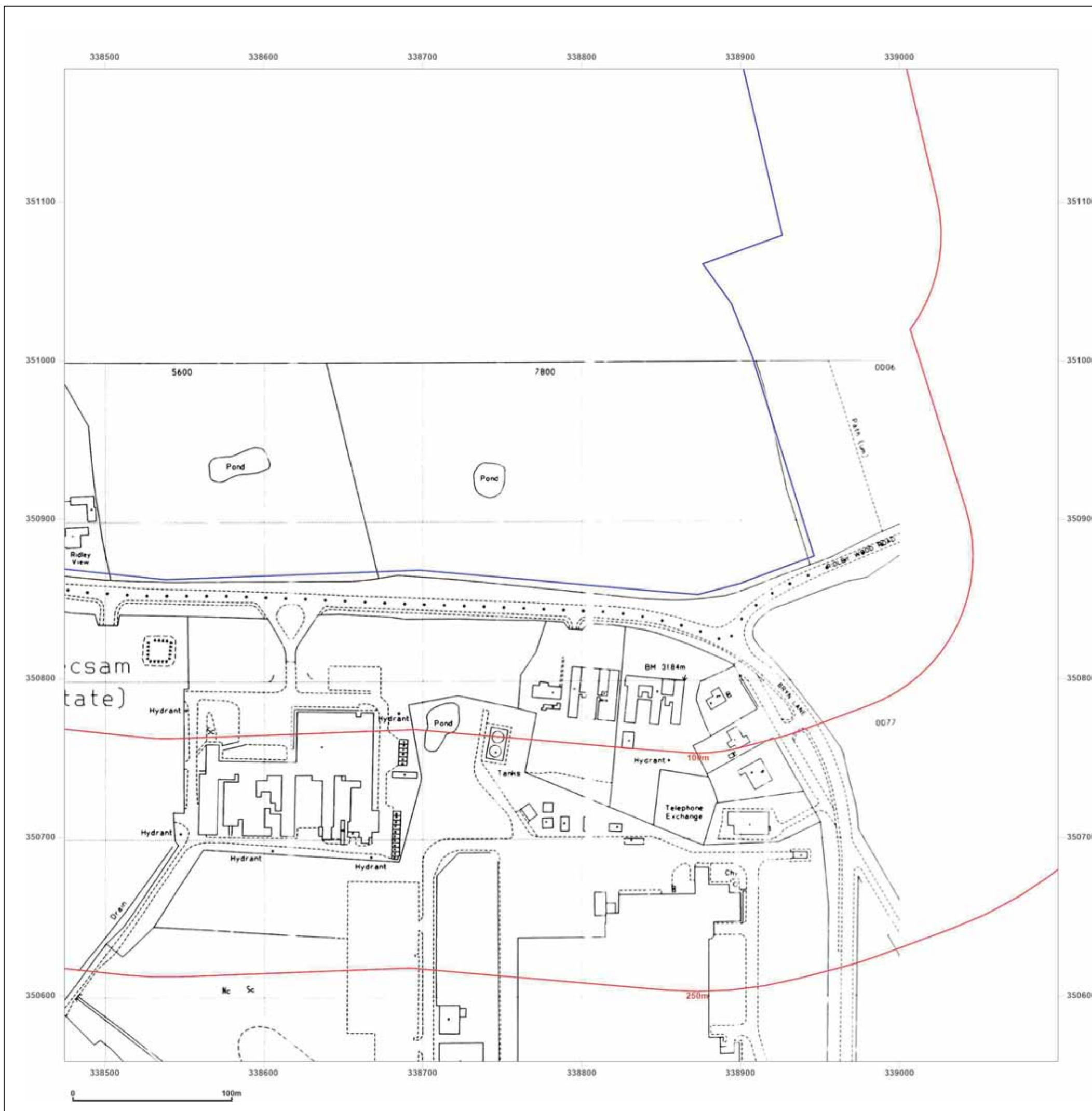


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Site Details:

LAND NORTH OF BRYN LANE,
WREXHAM INDUSTRIAL
ESTATE, WREXHAM, LL13 9UT

Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1987-1992

Scale: 1:2,500

Printed at: 1:2,500



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Site Details:

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ESTATE, WREXHAM, LL13 9UT

Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1989-1992

Scale: 1:2,500

Printed at: 1:2,500



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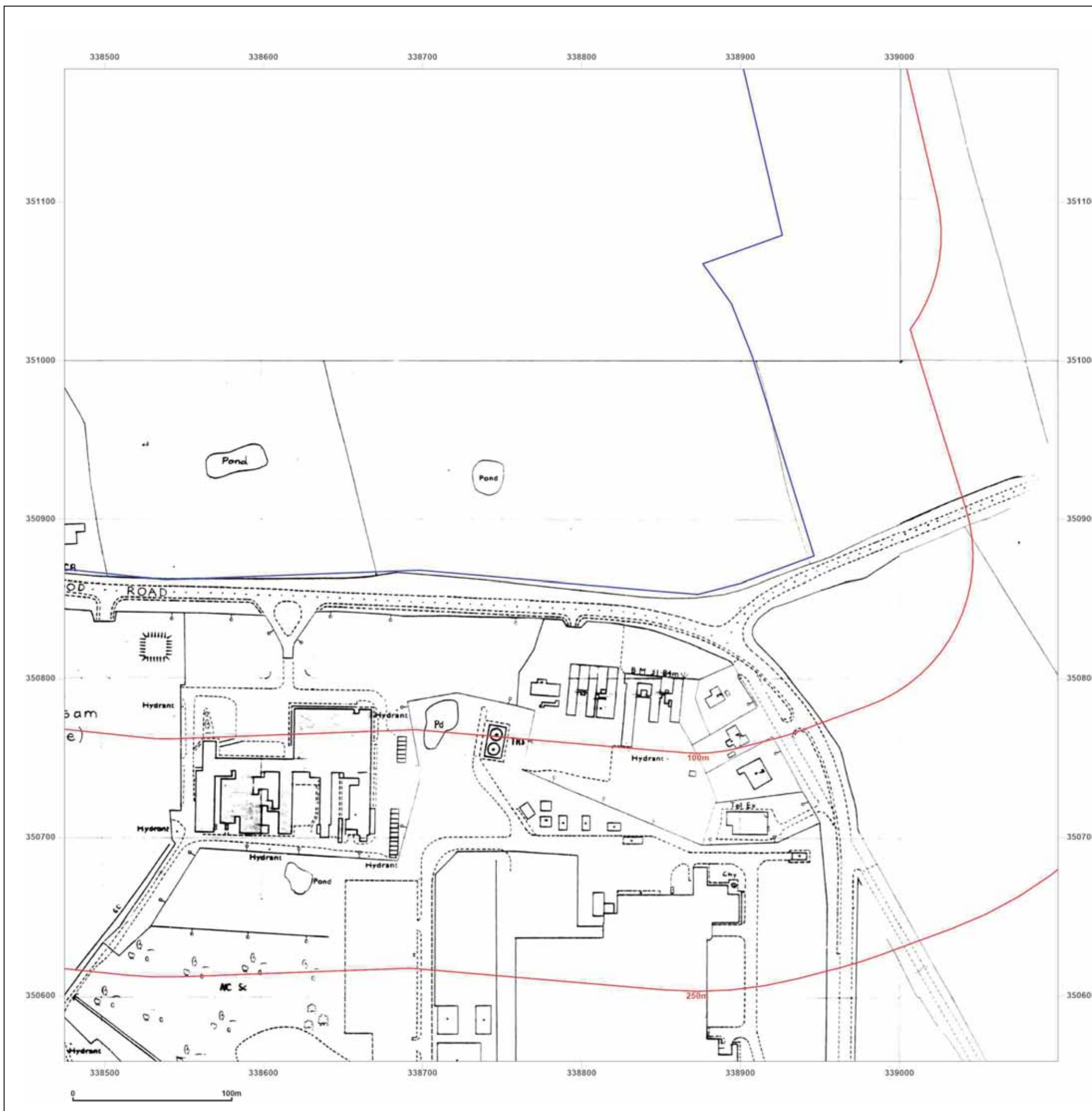


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Site Details:

LAND NORTH OF BRYN LANE,
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ESTATE, WREXHAM, LL13 9UT

Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1993
Edition N/A
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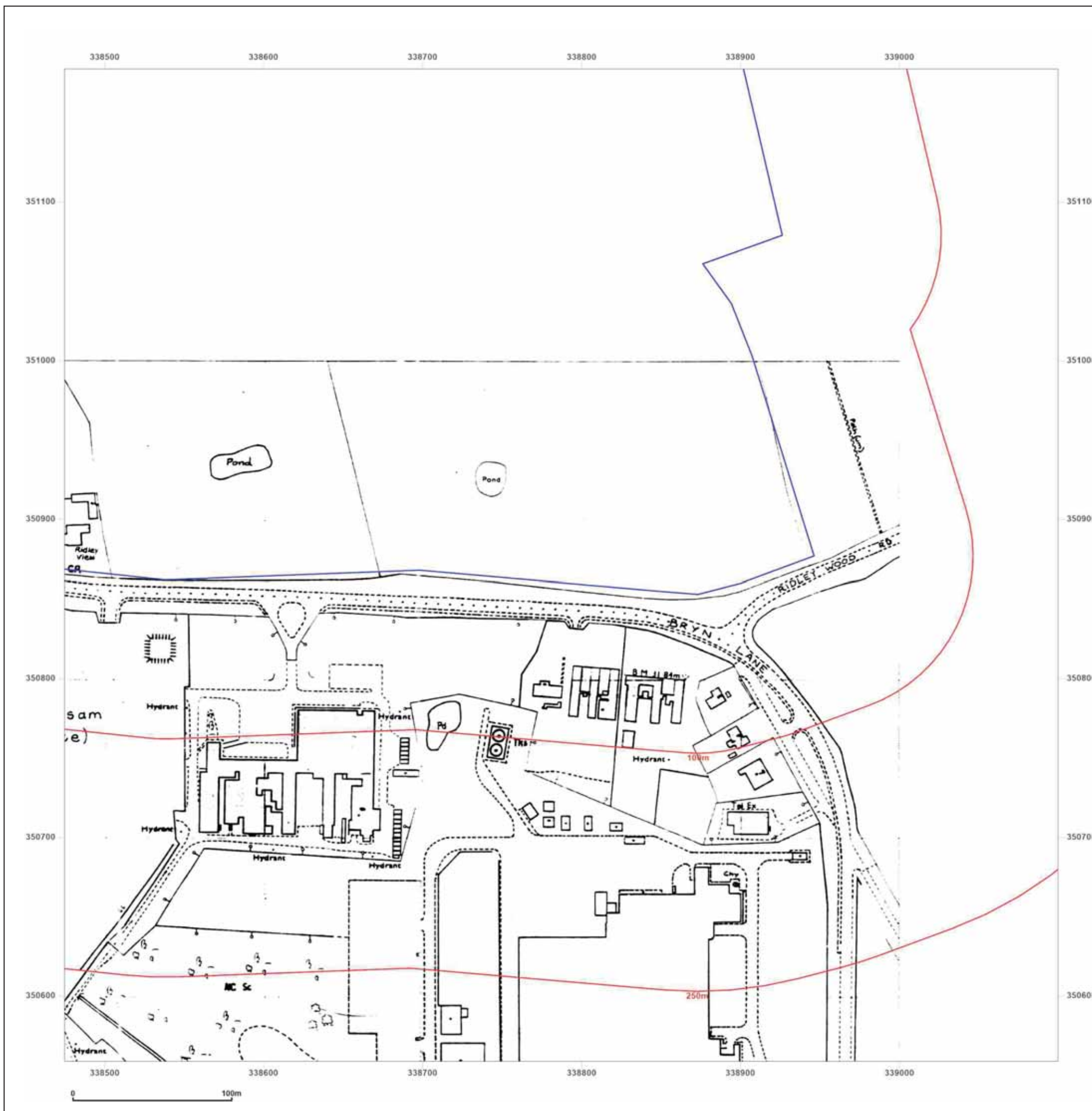


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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
Grid Ref: 338787, 350871

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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Client Ref: 1779_TE1624
Report Ref: GS-8287502_LS_2_1
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