Phase I Geoenvironmental Site Assessment
Wrexham Road
Holt

Reference:14-608-R1
Date: February 2021

PHASE I GEOENVIRONMENTAL SITE ASSESSMENT

Land off Wrexham Road
Holt
LL13 9YU

Prepared for:
Mrs V and Mr A Pridding

Report Ref: 14-608-R1
Date Issued: 12th February 2021

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EXECUTIVE SUMMARY

Site Address	Land off Wrexham Road, Holt, LL13 9YU	
Grid Reference	E 340580, N 353380.	
Site Area	1.76 Ha.	
Proposed Development	E3P understands that the land adjacent Sycamore House, Wrexham Road is a draft allocation site for Wrexham's Local Development Plan and J10 Planning are working on behalf of Mrs V and Mr A Pridding to obtain outline permission for a residential development comprising a minimum of 35 houses with associated adopted estate roads and utility infrastructure.	
Current Site Use	The site is an irregularly shaped parcel of land located north east of Wrexham, in Holt. The site is located within 500 m of the River Dee and is currently used as an agricultural field for grazing cattle. A barn and yard are present in the north east of the site, used for storage of tractors, vehicles and agricultural equipment. Hay is stored to the east of the barn.	
Site History	The site originally appeared to comprise agricultural land associated with the Sycamore House to the north. Orchards were present in the north west and north east until circa 1970. The north east of the site was used for informal storage until the construction of a barn and more permanent yard circa 2012	
Environmental Setting	**Drift Geology**	Till (Devensian – Diamicton) across the site. Potentially River Terrace Deposits (Sand and Gravel) are indicated immediately south of the site and may extend beneath.
	Bedrock Geology	Chester Formation (SANDSTONE)
	Faults	A fault is present within 500m of site.
	Hydrogeology	Secondary undifferentiated strata (drift) overlying a Principal productive aquifer (solid). There is one groundwater abstraction point within 250 m of site (245 m east).
	Hydrology	The nearest surface water course is located 223 m east of the site and is a tributary of the River Dee.
	Flood Risk	Unaffected by flooding from rivers.
Utility Locations	A utility survey has not been carried out. Anecdotal information from the landowner indicates no services to be present.	
Landfill Sites and Ground Gases	There are no current or historical landfill sites within 250 m of the site.	
Radon	Unaffected – no special precautions required.	
Hazardous Installations	No hazardous installations that could potentially prejudice the proposed construction of highly sensitive residential dwellings have been identified within influencing distance of the subject site.	

CONTAMINATED LAND ASSESSMENT

Human Health	The following potential on-site sources of contamination have been identified:

	- Made Ground in yard (north east) and infilled field boundaries.
	  - Organic biodegradable material – CO2 / CH4.
	  - Heavy Metals, Non-Volatile Polycyclic Aromatic Hydrocarbons (PAH).
	  - Inert materials such as brick, concrete, metal and glass.
	  - Asbestos
	- Former structures (north east)
	  - Asbestos
	- Agricultural Activities
	  - Leaks and spills from unrecorded fuel tanks/storage and agricultural machinery – Total Petroleum Hydrocarbons (TPH), PAH, Heavy Metals, Volatile Organic Compounds (VOC)
	  - Manure/Animal Wastes – E. Coli and Coliform Bacteria
	The overall risk to residential end users is considered low/moderate.

Controlled Waters	Given the predominantly undeveloped nature of the site, only limited potential sources of mobile contamination have been identified such as localised spillages/leaks from fuel storage or agricultural machinery. The site is indicated to be underlain by low permeability cohesive Glacial drift deposits across the site which will likely reduce downward migration into the underlying Principal bedrock aquifer. The site is not located within a Source Protection Zone and the nearest ground water abstraction zone is 245 m for spray irrigation (not potable/drinking water), the sensitivity of the underlying aquifer is therefore reduced. Furthermore, there are no surface watercourses within influencing distance of the site. There is therefore considered to be a low risk to controlled waters.
Ground Gas	No significant infilled features or landfills have been identified within close proximity of the site. Limited organic/degradable material may be present associated with infilled field boundaries and potential animal wastes (manure) which may present potential source of ground gas. However, migration of ground gases is likely to be reduced/inhibited by the presence of cohesive glacial drift deposits. The overall risk from ground gas is considered low.

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DRAWING LIST

14-608-R1-001 - Site Location Plan
14-608-R1-003 - Site Features Plan
14-608-R1-004 - Historical Features Plan

1. INTRODUCTION

1.1. BACKGROUND

E3P Ltd has been commissioned by J10 Planning on behalf of the Mrs V and Mr A Pridding (the client) to undertake a Phase I Geoenvironmental Site Assessment at land to the south of Wrexham Road, Holt, LL13 9YU.

This report is required to determine potential contaminated land liabilities and geotechnical constraints as part of a proposed site redevelopment.

1.2. PROPOSED DEVELOPMENT

E3P understands that the land adjacent Sycamore House, Wrexham Road is a draft allocation site for Wrexham's Local Development Plan and J10 Planning are working on behalf of Mrs V Pridding to obtain outline permission for a residential development comprising a minimum of 35 houses with associated adopted estate roads and utility infrastructure.

No proposed development layout has been provided to date.

1.3. OBJECTIVES

- The objectives of the geoenvironmental investigation are as follows:
- Review historical plans, geology, hydrogeology, site sensitivity, floodplain issues, mining records and any local authority information available in order to complete a desk study in line with Environment Agency (EA) document Land Contamination: Risk Management (LCRM) 2019 and BSI 10175 (Code of Practice for Investigation of Potentially Contaminated Land)..
- Assess the implications of any potential environmental risks, liabilities and development constraints associated with the site in relation to the future use of the site and in relation to off-site receptors.
- Assess the desk-study information and, where possible, provide preliminary recommendations in relation to foundations, pavement construction and floor slabs.
- Provide recommendations regarding future works required and undertake a preliminary pre-construction cost appraisal.

1.4. SOURCES OF INFORMATION

Background information was sought from the following sources:

- Envirocheck Search;
- Historical mapping dated 1886 to 2020. A selection of historical maps are reproduced in Appendix V;
- On-line planning records held by Wrexham County Borough Council;
- Consultations with representatives of Wrexham County Borough Council;
- Magic Map Groundwater Vulnerability Map;
- Radon: Guidance on protective measures for new buildings (BRE Document BR 211, 2007);
- British Geological Survey Map;
- Groundsure IO database;
- https://zeticauxo.com/downloads-and-resources/risk-maps/; and,
- https://flood-map-for-planning.service.gov.uk.

1.5. LIMITATIONS

The limitations of this report are presented in Appendix I.

1.6. CONFIDENTIALITY

E3P has prepared this report solely for the use of the client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from E3P; a charge may be levied against such approval.

2. SITE SETTING

2.1. SITE DETAILS

TABLE 2.1 SITE DETAILS

Site Address	Land off Wrexham Road, Holt, LL13 9YU
National Grid Reference	E 340580, N 353380.
Site Area	1.76 Ha.

All acronyms used within this report are defined in the Glossary presented in Appendix II.

A site location plan is presented in Appendix III as Drawing 14-608-001.

2.2. CURRENT SITE USE

E3P has undertaken a site walkover of the entire site and a description of the key findings is summarised in Table 2.2.

TABLE 2.2 SITE DESCRIPTION

Occupancy/Use	The subject site is an irregular shaped parcel of land located to the north east of Wrexham and is currently used as an agricultural field. The top left corner of the site is being used as an agricultural storage area and includes a barn and storage of tractors and vehicles. Hay is stored to the east of the barn.	
Surface Cover (%)	**Buildings**	5%
	Hardstand	10%
	Soft Cover	85%
Structures	A steel-clad pitched roof agricultural barn is present in the north east corner of site. The barn is of post 2000 construction.	
Access	Access is from Wrexham Road which runs along the northern boundary. There is parking available in the north eastern sector of the site where the land has been levelled.	
Slope	The site appears to be generally topographically level, with a slight dip in the south east.	
Retaining Structures	No retaining structures have been observed on site.	
Vegetation/Ecology	The site mainly comprises trimmed, mixed grass. There are hedgerows surrounding the site and some mature trees in the north east and west of site. The barn should be thoroughly checked for signs of bats and owls and an ecological survey undertaken if deemed necessary.	
Hazardous Material Storage	No above-ground storage tanks (ASTs) or underground storage tanks (USTs) were observed at the site. Given the agricultural nature of the site, it is possible that unrecorded fuel storage or septic tanks may have existed on-site at some point in the past.	
Asbestos-Containing Material (ACM)	The barn on site was constructed post 2000, and prior to this the site was undeveloped, it is unlikely that asbestos will be present on site.	

Polychlorinated Biphenyls (PCBs)	There is no equipment identified that may contain PCBs within the site boundary.
Waste Storage	Manure storage on-site may present a source of harmful bacterial on-site. No other potentially hazardous waste streams are unlikely to be generated at the site.
Drainage	A formal drainage survey has not been completed. There is a high likelihood that there will be land drains beneath the ground.

2.3. SURROUNDING AREA

The surrounding area land uses are summarised in Table 2.3.

TABLE 2.3 SURROUNDING LAND USES

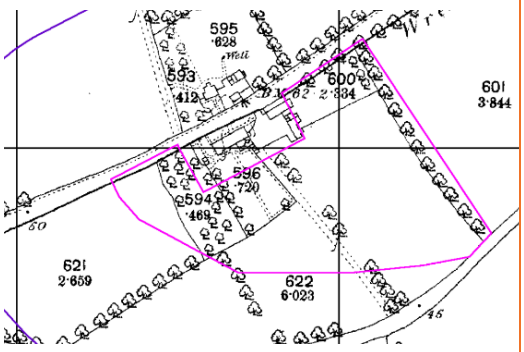
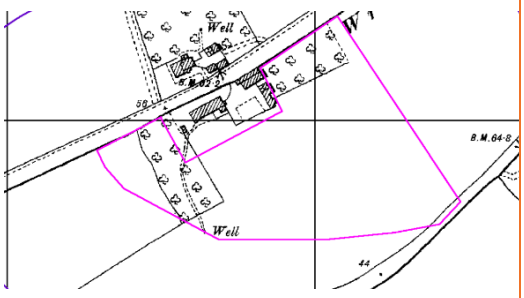
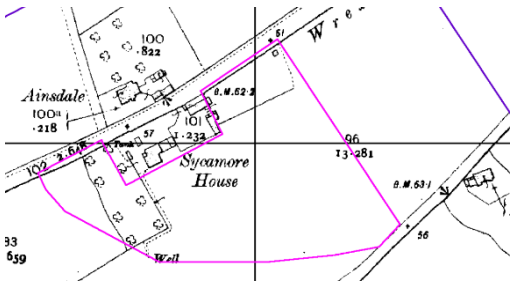
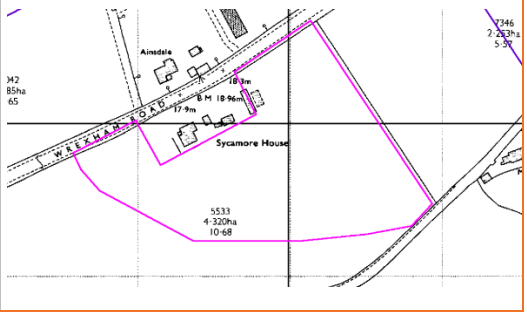
DIRECTION	LAND USE
North	The B5102, Wrexham Road and Sycamore House. Agricultural fields beyond.
East	Agricultural fields.
South	The A534 and agricultural fields.
West	A few residential units and agricultural fields.

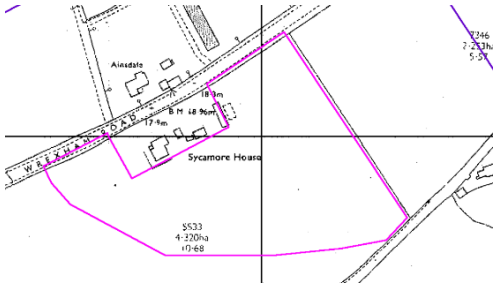
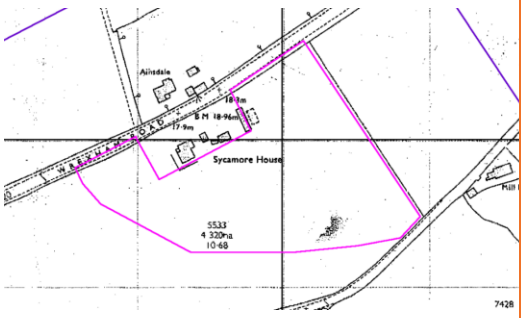
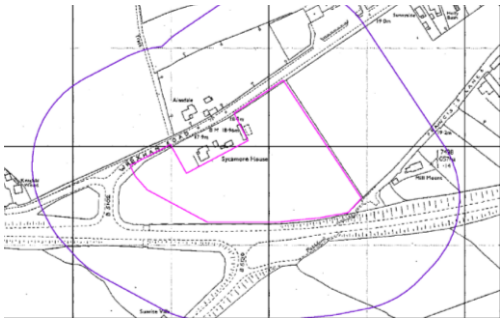
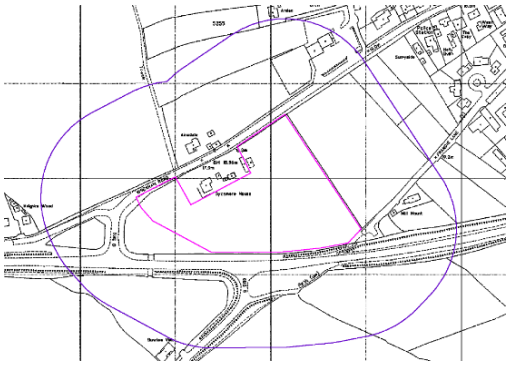
3. SITE HISTORY

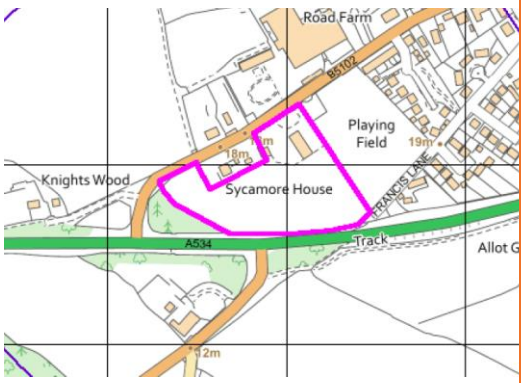
3.1. ON-SITE HISTORICAL DEVELOPMENT

A review of historical mapping and historical aerial imagery pertinent to the site is summarised in Table 3.1. In addition, historical site features are presented on Drawing No 14-608 in Appendix III.

TABLE 3.1 HISTORICAL DEVELOPMENT

MAP EDITION	HISTORICAL LAND USE	HISTORICAL MAP EXCERPT
1886 **1:2,500**	The site comprises land associated with the adjacent structure to the north. The site is bisected by a tree-lined footpath and trees are present in the north west and north east of the site, and along the eastern site boundary. A road is recorded running along the northern boundary of site and a second road is present adjacent the southern boundary.	
1899 **1:2,500**	Peripheral trees and the central footpath have been removed. The trees in the north west and north east of site are now orchards. A well is recorded in the south west of the site adjacent the boundary. A footpath is shown leading to the well through the western orchard.	
1911 **1:2,500**	The orchard in the north east has been removed and the property to the north is labelled Sycamore House.	
1971 **1:2,500**	The trees in the north west have been removed and a small structure is now shown, associated with the adjacent Sycamore House. The well is no longer shown.	

MAP EDITION	HISTORICAL LAND USE	HISTORICAL MAP EXCERPT
1974 **1:2,500**	No significant changes have been recorded on site.	
1982 **1:1,250**	No significant changes have been recorded on site.	
1987 **1:2,500**	The site itself remains unchanged but is now bound by a newly constructed road (A534) and cutting to the south.	
1993 **1:2,500**	No significant changes have been recorded on site.	

MAP EDITION	HISTORICAL LAND USE	HISTORICAL MAP EXCERPT
2001 Aerial Image	The north east of site appears to be used for farming storage.	
2020 **1:10,000**	A new structure has been constructed in the north east corner of site, presumed to be an agricultural barn.	
2020 Aerial Image	The north east of the site appears to be a yard used for storage of vehicles and agricultural machinery with a barn. The remainder of the site is a field used for grazing.	

3.2. OFF-SITE HISTORICAL DEVELOPMENT

A review of potentially contaminative uses identified on historical Ordnance Survey maps within a 250 m radius of the site is summarised in Table 3.2.

TABLE 3.2 SURROUNDING HISTORICAL DEVELOPMENT

SURROUNDING FEATURE	DISTANCE	DATES	DIRECTION
Infilled Field Boundaries	0-250 m	Pre 1888 – Present	North, South, East, West
Farm Buildings	0 m	Pre 1886 – Present	North
Road Embankment	0 m	Pre 1987 – Present	South
Depot	200 m	Pre 1971 – Present	East
Old Quarry	250 m	Pre 1888- Pre 1899	South East

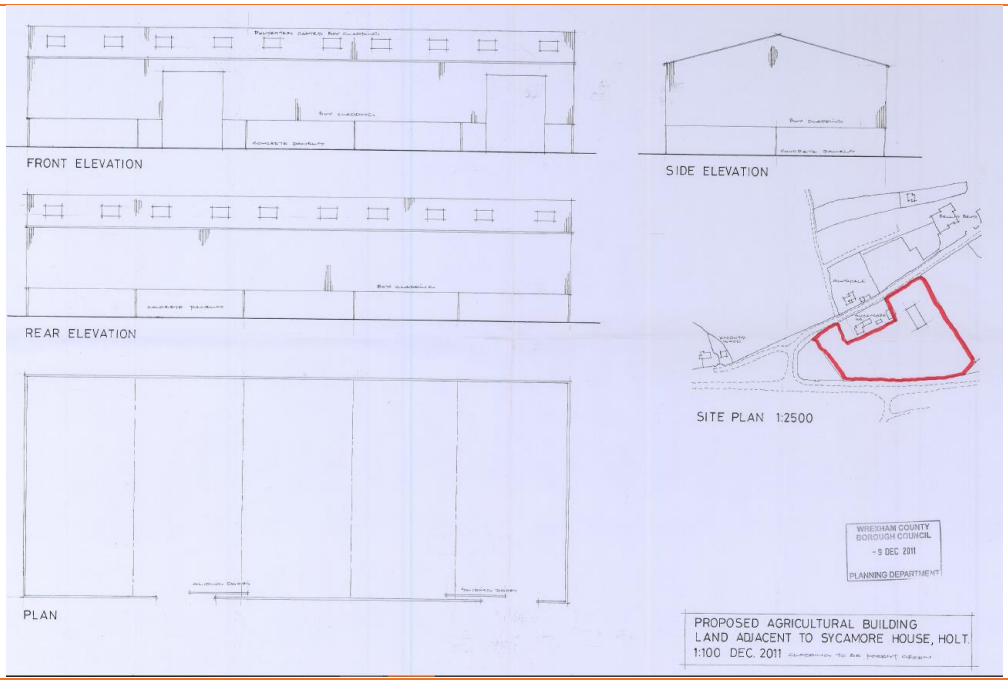
3.3. PLANNING HISTORY

E3P has undertaken a review of online planning records held by Wrexham Council and the following planning applications pertaining to the site have been reviewed:

- P/2011/0899 (December 2011) – Erection of Agricultural Building – Permission Granted.

No conditions related to contaminated land were placed on the development. An extract from the submitted proposed drawing is presented as Figure 3.1.

FIGURE 3.1 PLANNING DRAWINGS



4. ENVIRONMENTAL SETTING

4.1. GEOLOGY AND HYDROGEOLOGY

The British Geological Survey (BGS) map for the site, (Sheet 122, Nantwich, 1:50,000, Solid and Drift editions, 1967) and online records indicate the site is underlain by the geological sequence presented in Table 4.1.

TABLE 4.1 SUMMARY OF UNDERLYING GEOLOGY

GEOLOGICAL UNIT	CLASSIFICATION	DESCRIPTION	AQUIFER CLASSIFICATION
Drift	Glacial Till	SAND, CLAY and GRAVEL	Secondary undifferentiated
Solid	Chester Pebble Beds Formation	SANDSTONE PEBBLY (GRAVELLY)	Principal

Strata are shown to be dipping 20 degrees to the south east from horizontal. River Terrace deposits are indicated on mapping immediately south west and may extend beneath the site.

TABLE 4.2 FAULTING

LOCATION	DESCRIPTION
South East	Normal fault 120 m south striking NE-SW and downthrown to the north west.

The Envirocheck report indicates that the site is not located within a groundwater source protection zone. There is a groundwater abstraction point within 250m of site.

4.2. NATURAL LANDFORM AND GEOMORPHOLOGY

Based on the initial geological assessment, a review of available topographic data and pertinent mapping, E3P has undertaken a preliminary geomorphological assessment of the landform and its possible mechanism for formation.

The subject site is underlain by Glacial Till – these are deposits laid down by the deposition of melting ice shelf in the most recent glaciation. The underlying rock formations are associated with the Chester Sandstone Formation.

It is likely that the site groundwater will run eastwards towards the River Dee. The site will be within the River Catchment of the River Dee so it may be worth assessing recent hydrographs in order to discern whether the site is going to more liable to flooding with climate change.

Lidar data does not appear to indicate any artificial level changes on the site itself, however, the A534 roadway cutting to the south is visible.

FIGURE 4.2 SURFACE LIDAR DATA (GROUNDSURE IO)



4.3. GEOTECHNICAL DATA

Geotechnical data presented within a commercially available environmental database is summarised in Table 4.3.

TABLE 4.3 SUMMARY OF GEOTECHNICAL DATA

HAZARD	DESIGNATION
Shrink-Swell Clay	Very low risk
Landslides	Very low risk
Ground Dissolution	No hazard
Compressible Ground	No hazard
Collapsible Deposits	Very low risk
Running Sand	Very low risk

4.4. COAL MINING

The Envirocheck report states the site is not in an area that may be affected by coal mining.

4.1. RADON RISK POTENTIAL

The Envirocheck report indicates the site is situated in an area where less than 1% of homes are above the “Action Level” and that the BGS reports that full radon protective measures are not necessary in the construction of new dwellings or extensions.

4.2. PRELIMINARY GEOTECHNICAL ASSESSMENT

Based on the desk-study information, the following geotechnical assessment has been made:

- Given the predominantly undeveloped nature of the site, it is likely there will be limited Made Ground fill deposits and obstructions, except in the north west where a barn was more recently constructed. Existing buildings will require demolition, with all relict foundations if present, grubbed out, prior to the construction of the proposed development.
- A number of historically infilled field boundaries are present within the site boundary, which are potential sources of alluvial deposits, silts and possible organic peat deposits in addition to potential depths of Made Ground. Investigation will be required in order to assess these and undertake in-situ geotechnical testing to determine the likely foundation solution for plots in these areas.
- The River Dee may present further issues to the site with increasingly flashy rivers as time goes on.

4.3. HYDROLOGY

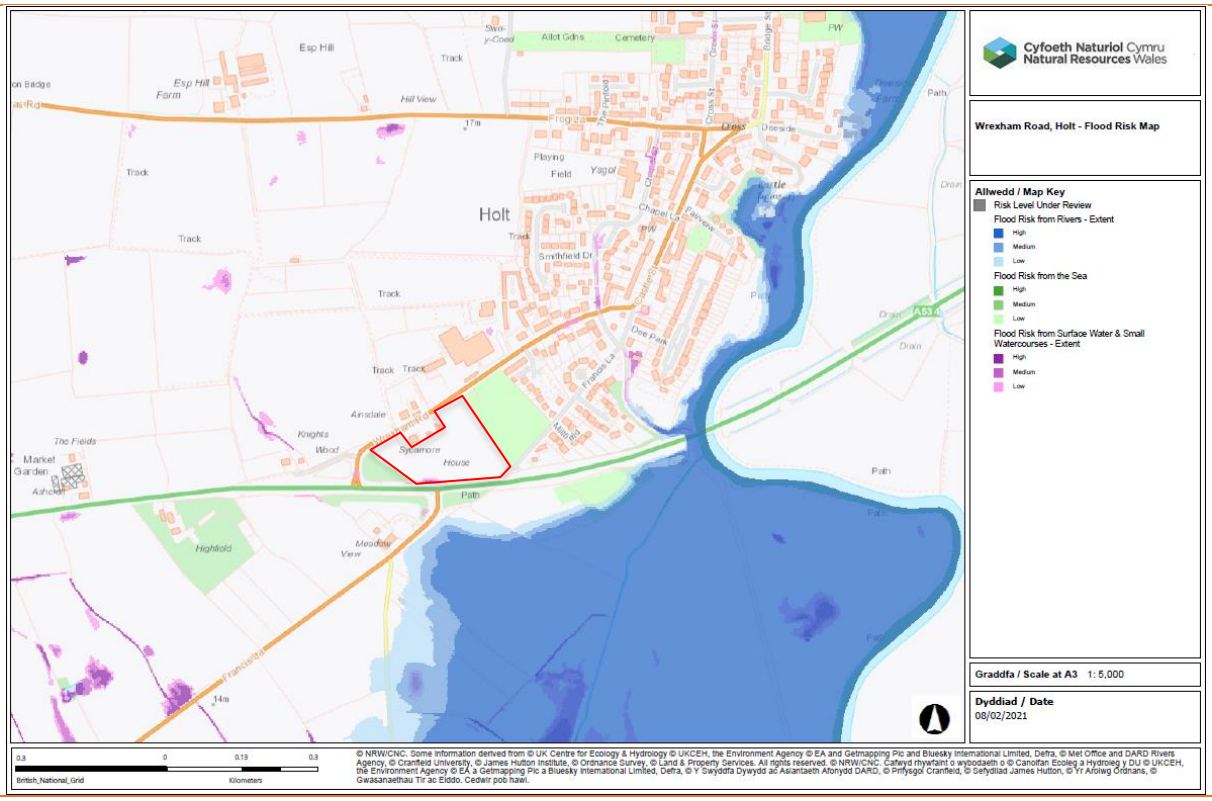
Surface water features within 250 m of the subject site are summarised in Table 4.4.

TABLE 4.4 SURFACE WATER FEATURES

SURFACE WATER FEATURE	QUALITY	DISTANCE (m)	DIRECTION
Unidentified	Undifferentiated	223 m	East

The site is located within a currently defined Zone 1, considered to be at little or no risk of fluvial or coastal or tidal flooding. However, the land immediately south of the site is classified as Flood Zone 2 and the River Dee, it is found 323 m to the east of site. Consideration for potential future flooding should therefore be considered in view of the anticipated lifetime of the development.

FIGURE 4.1 NATURAL RESOURCES WALES FLOOD MAP



Source - https://naturalresources.wales/evidence-and-data/maps/long-term-flood-risk

4.4. INDUSTRIAL LAND USES

The site is located within a predominantly agricultural and residential area; there are no entries within the trade directory for active industrial land uses within 250 m of site.

Inactive records within 250 m include a car dealers located 144 m east and Road Haulage Services located 193 m east.

4.5. SENSITIVE LAND USES

The site is situated within a predominantly agricultural setting. The closest residential properties are located adjacent to the northern boundary of the site and the nearest surface water course is located 223 m east of the site (tributary of the River Dee). No other environmentally sensitive land uses have been identified within close proximity to the site.

4.6. SITE SENSITIVITY ASSESSMENT

The site is assessed to be located within a “Low/Moderate” sensitivity setting as discussed within Table 4.5.

TABLE 4.5 SITE SENSITIVITY ASSESSMENT

SENSITIVITY PROFILE	DISCUSSION	RATING
Groundwater Source Protection Zone or Drinking Water Safeguard Zone	None within 250 m of site.	Low

SENSITIVITY PROFILE	DISCUSSION	RATING
Distance to the Closest Groundwater Abstraction Point	The closest groundwater abstraction is operating at Bellis Bros Ltd, located 245 m north of site for agricultural use and spray irrigation.	Low/Moderate
Aquifer Classification in Superficial Drift Deposits	Secondary Undifferentiated Aquifer.	Moderate
Aquifer Classification in Bedrock	Principal Aquifer	High
Is the Site Underlain by Low-Permeability Drift to Depths in Excess of 10 m?	As there are no BGS borehole records within a discernible distance from site. However, superficial deposits are anticipated to extend to depths >10 m bgl.	TBC
Is the Site Located Within 50 m of a Surface Watercourse?	The site is not located within 50 m of a Surface Watercourse	Low
Sensitive Land Uses	There are a few residential units within close proximity of the site.	Low
OVERALL SITE ENVIRONMENTAL SENSITIVITY		Low/Moderate

5. CONSULTATIONS

5.1. CONTAMINATED LAND OFFICER

E3P contacted the environmental health department at Wrexham Council who have been unable to respond within the reporting timescales. Upon receipt of the search information, E3P will issue any pertinent information and/or use the information to inform the development of any intrusive investigation proposals.

5.2. LANDFILL SITES AND WASTE TREATMENT SITES

There are no landfill sites or waste treatment sites within 250 m of the site. There is one record for a historical landfill site located 758 m to the east at Appleby Drain, Cheshire, which received inert waste between 1976 and 1987.

5.3. REGULATORY DATABASE

The information summarised in Table 5.1 has been obtained from a commercially available environmental database. The summary table only includes records from within 250 m of the subject site and not otherwise detailed in the report.

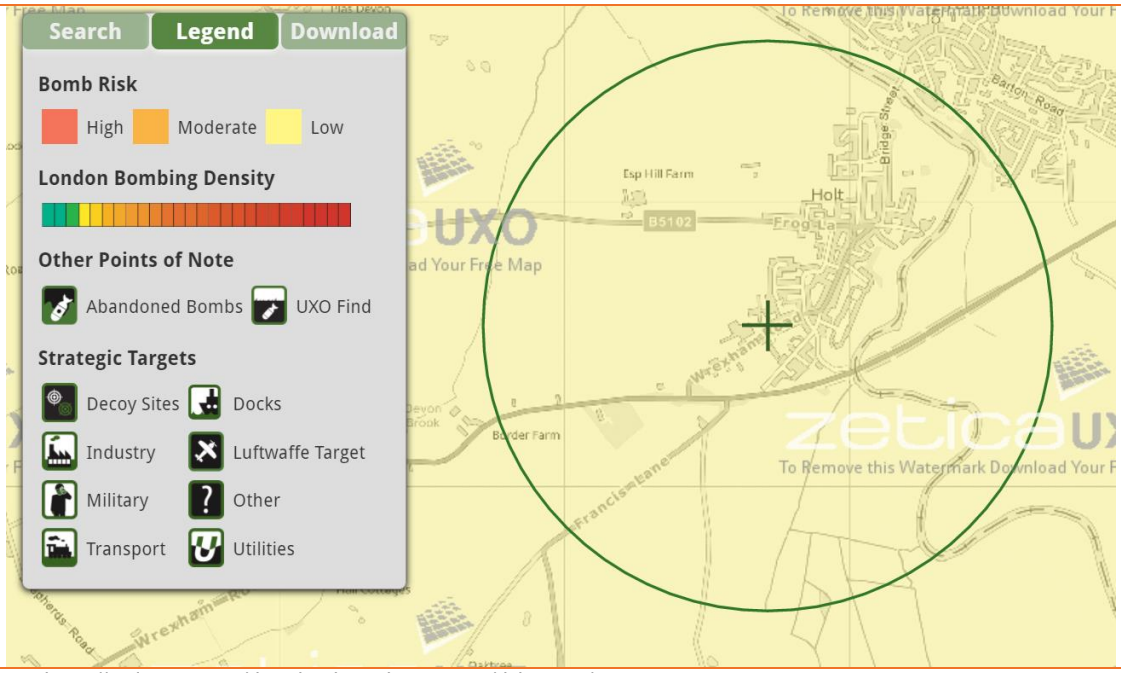
TABLE 5.1 SUMMARY OF ENVIRONMENTAL DATA

RECORD	ENTRIES WITHIN 250 m	DETAILS
Contaminated Land Register Entries and Notices	0	None Identified
Authorised Industrial Processes (IPC/IPPC/LAPPC)	0	None Identified
Fuel Stations Entries	0	None Identified
Licensed Radioactive Substances	0	None Identified
Enforcements, Prohibitions or Prosecutions	0	None Identified
Discharge Consents	0	None Identified
Pollution Incidents	0	None Identified
Consents Issued Under the Planning (Hazardous Substances) Act 1990	0	None Identified
Control of Major Accident Hazard (COMAH) Sites	0	None Identified

5.4. UNEXPLODED ORDNANCE

The regional unexploded bomb risk map from Zetica (2014) indicates that the site is in an area at low risk from possible unexploded ordnance (UXO) resulting from the Second World War. The Zetica UXO Risk Map is presented as Figure 5.1.

FIGURE 5.1 ZETICA UXO RISK MAP



Source - https://zeticauxo.com/downloads-and-resources/risk-maps/

5.5. INITIAL CONCEPTUAL SITE MODEL

In accordance with EA LCRM (2019) and BSI 10175 (Code of Practice for Investigation of Potentially Contaminated Land), E3P has developed an initial conceptual site model (CSM) to identify potential contamination sources, migration pathways and receptors within the study area. This is summarised within Table 5.2.

ON-SITE SOURCES OF CONTAMINATION

The following potential on-site sources of contamination have been identified:

- Made Ground in yard (north east) and infilled field boundaries.
  - Organic biodegradable material – CO2 / CH4.
  - Heavy Metals, Non-Volatile Polycyclic Aromatic Hydrocarbons (PAH).
  - Inert materials such as brick, concrete, metal and glass.
  - Asbestos

- Former structures (north east)
  - Asbestos
- Agricultural Activities
  - Leaks and spills from unrecorded fuel tanks/storage and agricultural machinery – Total Petroleum Hydrocarbons (TPH), PAH, Heavy Metals, Volatile Organic Compounds (VOC)
  - Manure/Animal Wastes – E. Coli and Coliform Bacteria

OFF-SITE SOURCES OF CONTAMINATION

The following potential off-site source of contamination have been identified:

- General agricultural activities

5.6. CONCEPTUAL SITE MODEL

Following the completion of the intrusive site investigation, chemical analysis and risk assessment, the conceptual model shown in Table 5.1 has been prepared for the site.

TABLE 5.1 CONCEPTUAL MODEL

POLLUTANT LINKAGE	CONTAMINANT (SOURCE)	PATHWAY	RECEPTOR	PROBABILITY	CURRENT RISK	RESIDUAL RISK AFTER MITIGATION
PL1 PL2	Heavy Metals, non-volatile PAH, pathogens/bacteria (Made Ground/Animal Waste)	Dermal contact. Dermal contact and ingestion.	Future site users. Off-site receptors.	Low Likelihood	Low/Moderate	LOW
Discussion: Made Ground is likely to be present in the north east of the site, which has been used for storage since circa 2000 and more recently developed as a more permanent storage yard with agricultural barn. Heavy metals and non-volatile PAH may be present within underlying soils. Animal waste (manure) storage may also be a source of faecal bacteria/pathogens. The overall risk to end users is considered low/moderate. **Recommendation:** Intrusive investigation to confirm preliminary assessment. If found, risks to end users will be mitigated through installation of a suitable cover system in areas of soft landscaping/private gardens. Construction works should be completed with PPE and provision of welfare.						
PL3	Asbestos Containing Material (ACM) in Made Ground	Inhalation of dust.	Future site users. Buildings. Off-site land users.	Low Likelihood	Low	LOW
Assessment: It is possible that ACM may be present in near surface Made Ground soils in the north east of the site associated with former structures or possible storage of ACM prior to development of the yard, albeit highly localised. Given the age of the existing barn on site (post 2000), it is very unlikely that asbestos will be present and therefore a pre-demolition survey may not be required. The overall risk to end users is considered low.						

POLLUTANT LINKAGE	CONTAMINANT (SOURCE)	PATHWAY	RECEPTOR	PROBABILITY	CURRENT RISK	RESIDUAL RISK AFTER MITIGATION
Recommendation: Intrusive investigation to confirm preliminary assessment. If found, risks to end users will be mitigated through installation of a suitable cover system in areas of soft landscaping/private gardens. Construction works completed with PPE and provision of welfare.						
PL4	Volatile Contaminants such as hydrocarbons(Made Ground, unrecorded tanks agricultural machinery, storage yard)	Inhalation of vapours. Migration through permeable strata and preferential pathways.	Future site users. Off-site receptors.	Low Likelihood	Low/Moderate	**LOW**
Assessment: It is possible that an unrecorded heating oil tank may have been present on-site at one time, there is also potential that small scale fuel storage associated with agricultural plant may have occurred, which may have resulted in localised spills/leaks of hydrocarbons/VOCs. The overall risk to end users is considered low/moderate. **Recommendation:** Intrusive investigation required. If found, risks to construction workers will be mitigated through the use of appropriate PPE and good hygiene, risks to end users will be mitigated through delineation and removal of any volatile hotspots, with installation of a suitable cover system in areas of soft landscaping/private gardens.						

POLLUTANT LINKAGE	CONTAMINANT (SOURCE)	PATHWAY	RECEPTOR	PROBABILITY	CURRENT RISK	RESIDUAL RISK AFTER MITIGATION
PL4	Methane, carbon dioxide (peat, organic materials and potentially infilled features on and within 250 m of the site)	Inhalation of gas. Migration through permeable strata and preferential pathways. Explosion in confined spaces.	Future site users. Buildings. Off-site land users.	Low likelihood	Low	Low
Assessment: No significant infilled features or landfills have been identified within close proximity of the site. Limited organic/degradable material may be present associated with infilled field boundaries and potential animal wastes (manure) which may present potential source of ground gas. However, migration of ground gases is likely to be reduced/inhibited by the presence of cohesive glacial drift deposits. The overall risk to end users is considered low. **Recommendation:** A programme of ground gas monitoring should be undertaken to confirm the preliminary assessment. If elevated ground gas concentrations are recorded, the risks to end users can be mitigated through the installation an appropriate ground gas protection measures.						
PL5	Mobile contaminants such as metals, PAHs, hydrocarbons, volatile compounds (Made Ground)	Surface runoff. Migration through permeable strata and preferential pathways. Perched waters migration.	Groundwater Secondary Undifferentiated and Principal Aquifer). Surface water (River Dee and Tributaries).	Low Likelihood	Low/Moderate	Low
Assessment: Given the predominantly undeveloped nature of the site, limited potential sources of mobile contamination have been identified such as localised spillages/leaks from fuel storage or agricultural machinery. The site is indicated to be underlain by low permeability cohesive Glacial drift deposits which will likely reduce downward migration into the underlying Principal bedrock aquifer The site is not located within a Source Protection Zone and the nearest ground water abstraction zone is 245 m for spray irrigation (not potable/drinking water), the sensitivity of the underlying aquifer is therefore reduced. Furthermore, there are no surface watercourses within influencing distance of the site. There is considered to be a low risk to controlled waters.						



POLLUTANT LINKAGE	CONTAMINANT (SOURCE)	PATHWAY	RECEPTOR	PROBABILITY	CURRENT RISK	RESIDUAL RISK AFTER MITIGATION
Recommendation: Groundwater sampling should be carried out to confirm the preliminary assessment.						
PL6	Sulphate (Made Ground)	Sulphate attack on concrete.	Building structure.	Low Likelihood	Low	Low
Assessment: Limited Made Ground containing elevated sulphate concentrations may be present in the north east of the site. **Recommendation:** Intrusive investigation required. If found, risks to foundations can be mitigated through use of sulphate resistant concrete.						
PL7	Organic contaminants such as hydrocarbons, VOCs (Made Ground, fuel storage/leaks))	Ingestion of tainted water supply.	Future site users. Water pipes.	Low Likelihood	Low	**Low**
Assessment: There is potential for limited/localised elevated concentrations of PAH, TPH and VOCs within Made Ground in the north east of the site, which may pose a risk of corrosion to potable water pipework and tainting of the water supply. **Recommendation:** Intrusive investigation along the proposed pipeline route will ultimately be required to determine the most appropriate pipe type.						

POLLUTANT LINKAGE	CONTAMINANT (SOURCE)	PATHWAY	RECEPTOR	PROBABILITY	CURRENT RISK	RESIDUAL RISK AFTER MITIGATION
PL8	Phytotoxic contaminants (Made Ground)	Direct Contact (plant uptake).	Flora.	Low Likelihood	Low	Low
Assessment: There is potential for elevated concentrations of Zinc, Nickel and Copper in the Made Ground beneath the site which may inhibit healthy plant growth. **Recommendation:** Investigation work as part of PL1.						

Main exposure pathways:
PL1 = soil ingestion, PL2 = dermal contact and ingestion, PL3 = dust inhalation; PL4 = Vapour/Gas Inhalation; PL5 = Vertical / Lateral Migration; PL6 = Corrosion of concrete; PL7=Tainting of water supply; PL8 = Uptake by plants.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. SITE SUMMARY

Current Site Use	The subject site is an irregular shaped parcel of land located to the north east of Wrexham and is currently used as an agricultural field for grazing cattle. A barn and yard are present in the north east of the site, used for storage of tractors, vehicles and agricultural equipment. Hay is stored to the east of the barn.
Historical Site Use	The site originally appeared to comprise agricultural land associated with the Sycamore House to the north. Orchards were present in the north west and north east until circa 1970. The north east of the site was used for informal storage until the construction of a barn and more permanent yard circa 2012.
Site Sensitivity	Low/moderate sensitivity. The site is located in a predominantly agricultural / rural setting with a recent residential development constructed to the east. The river dee is located to the east.

6.2. CONTAMINATED LAND ASSESSMENT

Human Health	The following potential on-site sources of contamination have been identified:
	• Made Ground in yard (north east) and infilled field boundaries.
	  ▪ Organic biodegradable material – CO2 / CH4.
	  ▪ Heavy Metals, Non-Volatile Polycyclic Aromatic Hydrocarbons (PAH).
	  ▪ Inert materials such as brick, concrete, metal and glass.
	  ▪ Asbestos
	• Former structures (north east)
	  ▪ Asbestos
	• Agricultural Activities
	  ▪ Leaks and spills from unrecorded fuel tanks/storage and agricultural machinery – Total Petroleum Hydrocarbons (TPH), PAH, Heavy Metals, Volatile Organic Compounds (VOC)
	  ▪ Manure/Animal Wastes – E. Coli and Coliform Bacteria
	The overall risk to residential end users is considered low/moderate.

Controlled Waters	Given the predominantly undeveloped nature of the site, limited potential sources of mobile contamination have been identified such as localised spillages/leaks from fuel storage or agricultural machinery. The site is indicated to be underlain by low permeability cohesive Glacial drift deposits till across the which will likely reduce downward migration into the underlying Principal bedrock aquifer. The site is not located within a Source Protection Zone and the nearest ground water abstraction zone is 245 m for spray irrigation (not potable/drinking water), the sensitivity of the underlying aquifer is therefore reduced. Furthermore, there are no surface watercourses within influencing distance of the site. There is therefore considered to be a low risk to controlled waters.
Ground Gas	No significant infilled features or landfills have been identified within close proximity of the site. Limited organic/degradable material may be present associated with infilled field boundaries and potential animal wastes (manure) which may present potential source of ground gas. However, migration of ground gases is likely to be reduced/inhibited by the presence of cohesive glacial drift deposits. The overall risk from ground gas is considered low.
Potable Water	There is potential for limited/localised elevated concentrations of PAH, TPH and VOCs within Made Ground in the north east of the site, which may pose a risk of corrosion to potable water pipework and tainting of the water supply.

6.3. GEOTECHNICAL ASSESSMENT

Geological	The site is anticipated to be underlain by cohesive drift deposits. There is potential for granular deposits (River Terrace) in the south of the site. Soft/compressible organic deposits are not anticipated.
Civil and Structural	Obstructions/relict foundations may be present in the north east of the site associated with former buildings and the existing barn. Soakaway drainage may be feasible if granular deposits are encountered.
Abnormal Foundations	Abnormal foundation are unlikely to be required.

END OF REPORT

APPENDIX I
LIMITATIONS

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between E3P and the client as indicated in Section 1.3.

2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information it has been assumed it is correct. No attempt has been made to verify the information.

3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination which are enforced by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.

4. During the site walkover, reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover, no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not been made known or accessible.

5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.

6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.

7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials, this is for indicative purposes only and do not constitute or replace full and proper surveys.

8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.

9. E3P cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by E3P is owned by them and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by E3P in this connection without their explicit written agreement there to by E3P.

10. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.

APPENDIX II
GLOSSARY

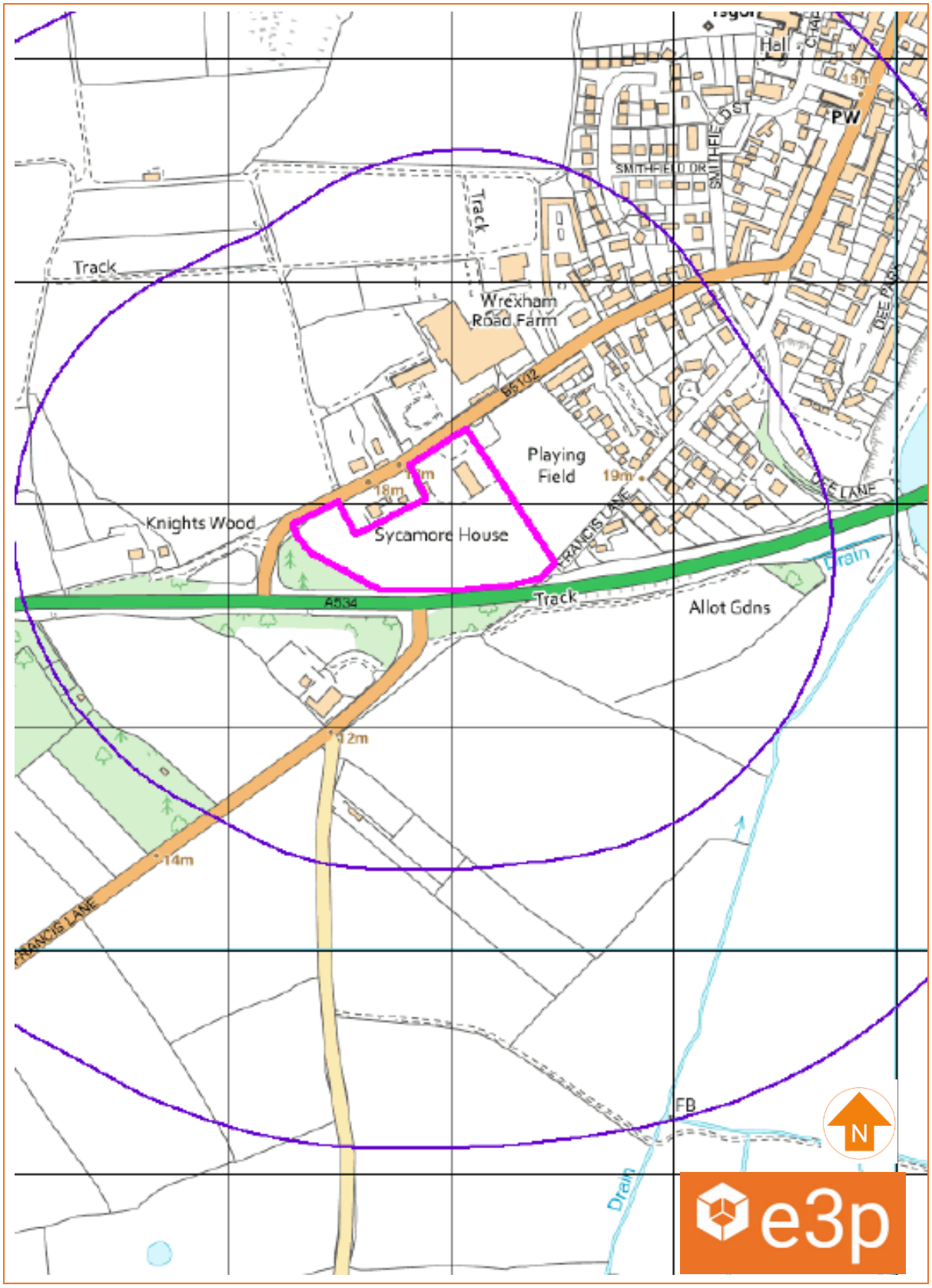
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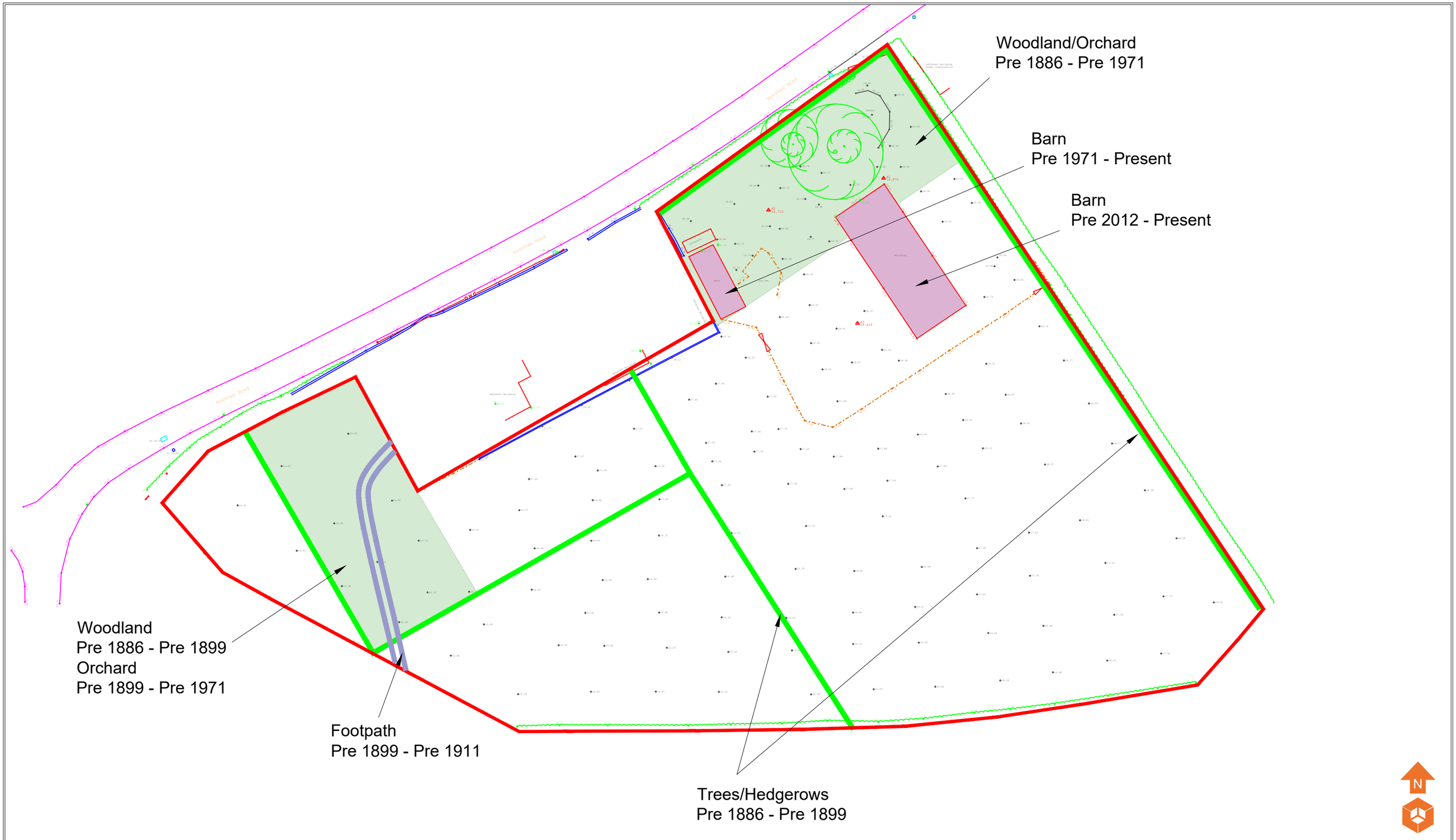
ACM	Asbestos-containing material	**MMP**	Materials management plan
ADS	Acoustic design statement	**ND**	Not detected
AST	Above-ground storage tank	**NDP**	Nuclear density probe
BGS	British Geological Survey	**NMP**	Noise management plan
BSI	British Standards Institute	**NPSE**	Noise policy statement for England
BTEX	Benzene, toluene, ethylbenzene, xylenes	**NR**	Not recorded
CA	Coal Authority	**PAH**	Polycyclic aromatic hydrocarbon
CBR	California bearing ratio	**PCB**	Polychlorinated biphenyl
CIEH	Chartered Institute of Environmental Health	**PI**	Plasticity index
CIRIA	Construction Industry Research Association	**PID**	Photo ionisation detector
CLEA	Contaminated land exposure assessment	**POS**	Public open space
CML	Council of Mortgage Lenders	**PPE**	Personnel protective equipment
CoC	Contaminants of concern	**ProPG**	Professional practice guidance
CSM	Conceptual site model	**QA**	Quality assurance
DNAPL	Dense non-aqueous phase liquid (chlorinated solvents, PCB)	**SGV**	Soil guideline value
DWS	Drinking water standard	**SPH**	Separate-phase hydrocarbon
EA	Environment Agency	**SPT**	Standard penetration test
EQS	Environmental quality standard	**SVOC**	Semi-volatile organic compound
FFL	Finished floor level	**TPH**	Total and speciated petroleum hydrocarbon
GAC	General assessment criteria	**TPH CWG**	Total Petroleum Hydrocarbon (Criteria Working Group)
GL	Ground level	**UKWIR**	United Kingdom Water Infrastructure Risk
GSV	Gas screening value	**UST**	Underground storage tank
HCV	Health criteria value	**VCC**	Vibro-concrete column
ICSM	Initial conceptual site model	**VOC**	Volatile organic compound
LEL	Lower explosive limit	**VRSC**	Vibro-replacement stone columns
LMRL	Lower method reporting limit	**VSC**	Vibro-stone columns
LNAPL	Light non-aqueous phase liquid (petrol, diesel, kerosene)	**WHO**	World Health Organisation
MCV	Moisture condition value	**WRAP**	Waste and Resources Action Programme
MIBK	Methyl isobutyl ketone	**WTE**	Water table elevation

m	Metres	**ppm**	Parts per million
km	Kilometres	**mg/m^3**	Milligram per metre cubed
% v/v	Percent volume in air	**m bgl bgl**	Metres below ground level
mb	Millibars (atmospheric pressure)	**m bcl**	Metre below cover level
l/hr	Litres per hour	**mAOD**	Metres above ordnance datum (sea level)
µg/l	Micrograms per litre (parts per billion)	**kN/m^2**	Kilonewtons per metre squared
ppb	Parts per billion	**µm**	Micrometre
mg/kg	Milligrams per kilogram (parts per million)	**SSRT**	Site Specific Remediation Target
PSD	Particle Size Distribution	**DD**	Dry Density
CL:AIRE	Contaminated Land: Applications in Real Environments	**Mc**	Moisture Content
ρ	Bulk Density	**GPR**	Ground Penetrating Radar
NDP	Nuclear Density Probe	**FFL**	Finished Floor Level
LEL	Lower Explosive Limit	**UKWIR**	UK Water Industry Research
CIRIA	Construction Industry Research and Information Association	**LOD**	Limit of Detection

APPENDIX III
DRAWINGS

DRAWING 14-608-001 – SITE LOCATION PLAN





Historical Features

- Former Woodland/Orchard
- Former Trees/Hedgerow
- Former Footpath
- Barn

Notes:

P1	REVA	12.02.2021	CB	JS
Phase	Issue	Date	Drawn	Checked

Client: Mrs V and Mr A Pridding

Job No: 14-608

Date: 12.02.2021

Drawing No: 003

Scale: 1:750 @ A3

Job Title: Wrexham Road, Holt

Drawing Title: Historical Features Plan

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Site Features

- Grassland
- Gravel
- Mature Trees
- Barn
- Manure Storage

Notes:

Client: Mrs V and Mr A Pridding

Job No: 14-608

Date: 12.02.2021

Drawing No: 004

Scale: 1:750 @ A3

Phase	Issue	Date	Drawn	Checked
P1	REVA	12.02.2021	CB	JS

Job Title: Wrexham Road, Holt

Drawing Title: Site Features Plan

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APPENDIX IV
PHOTOGRAPHS

PLATE 1 ENTRANCE TO FIELD FROM YARD



PLATE 2 VIEW ACROSS MAIN FIELD



PLATE 3 VIEW ACROSS MAIN FIELD

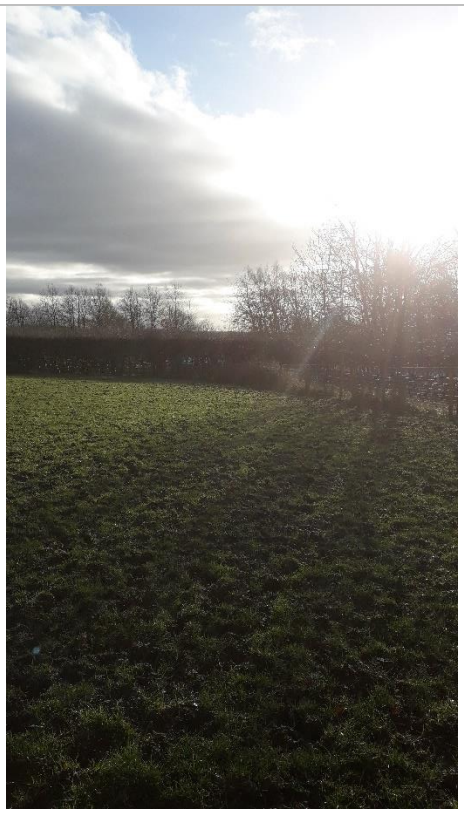


PLATE 4 WET GROUND IN CENTRAL SECTOR



PLATE 5 ENTRANCE TO SITE FROM WREXHAM ROAD (MATURE TREES AND BARN)



PLATE 6 ENTRANCE TO SITE FROM WREXHAM ROAD



APPENDIX V
HISTORICAL MAPS

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
·285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)
R.D. Bdy. Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

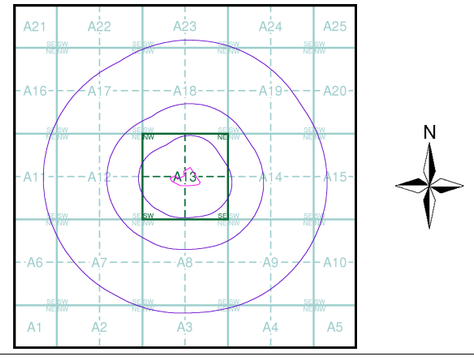
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

e3p

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Denbighshire	1:10,560	1878 - 1879	2
Cheshire	1:10,560	1881	3
Cheshire	1:10,560	1899 - 1900	4
Denbighshire	1:10,560	1900	5
Flintshire	1:10,560	1900	6
Cheshire	1:10,560	1913 - 1914	7
Denbighshire	1:10,560	1914	8
Denbighshire	1:10,560	1938 - 1954	9
Denbighshire	1:10,560	1954	10
Ordnance Survey Plan	1:10,000	1954	11
Ordnance Survey Plan	1:10,000	1964	12
Ordnance Survey Plan	1:10,000	1968	13
Ordnance Survey Plan	1:10,000	1970	14
Ordnance Survey Plan	1:10,000	1976	15
Ordnance Survey Plan	1:10,000	1983	16
Ordnance Survey Plan	1:10,000	1992 - 1993	17
10K Raster Mapping	1:10,000	1999 - 2000	18
10K Raster Mapping	1:10,000	2006	19
VectorMap Local	1:10,000	2020	20

Historical Map - Slice A



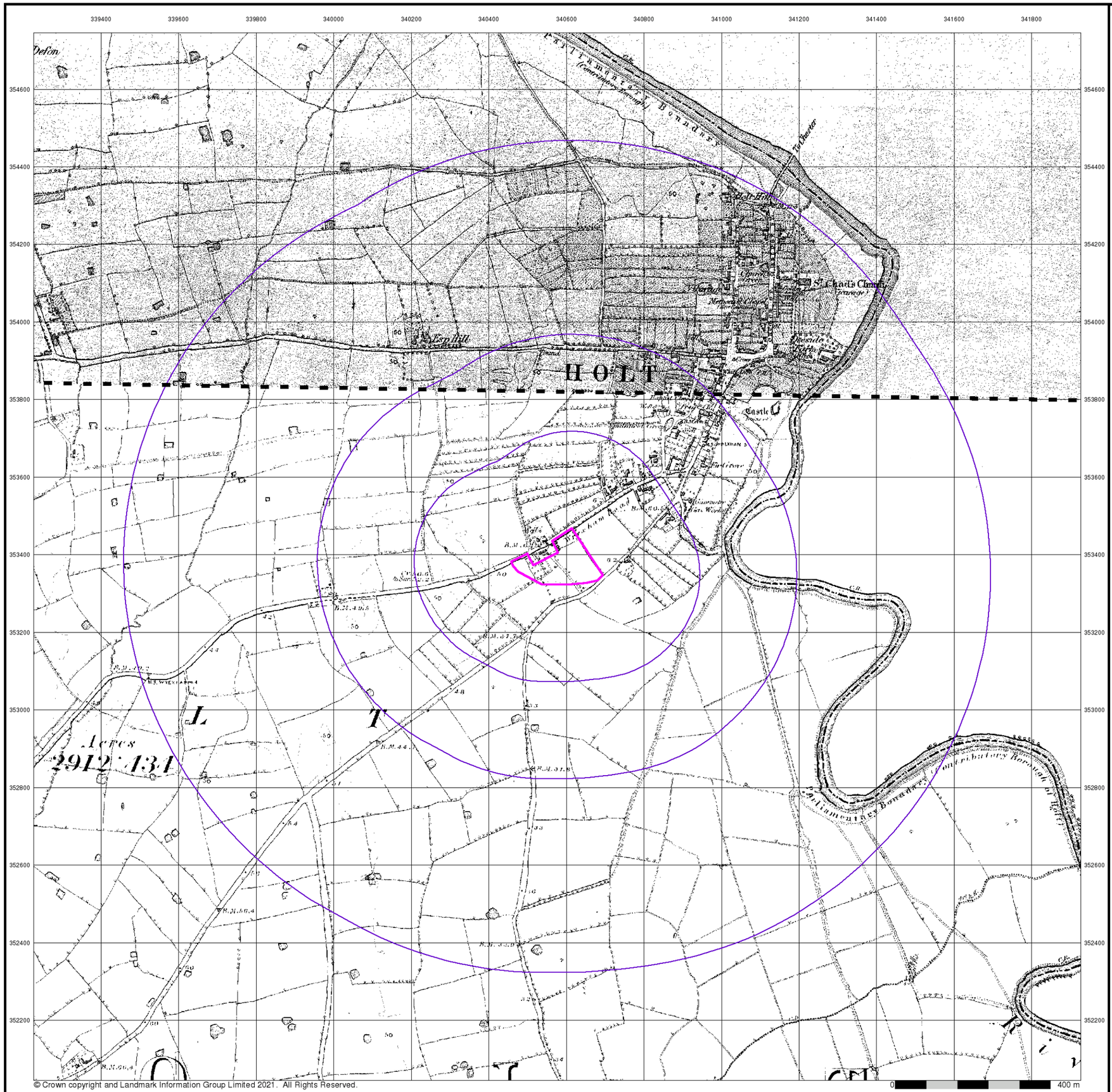
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Order Number: 272013330_1_1
Customer Ref: 14-608 IM A
National Grid Reference: 340580, 353380
Slice: A
Site Area (Ha): 1.76
Search Buffer (m): 1000

Site Details

Wrexham Road, Holt, WREXHAM, LL13 9YU

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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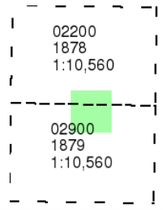
Denbighshire

Published 1878 - 1879

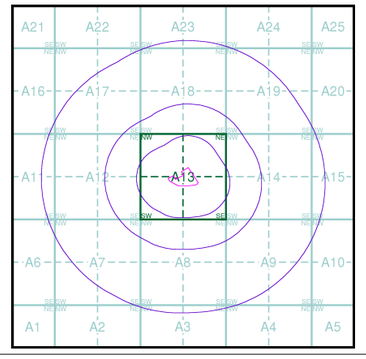
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



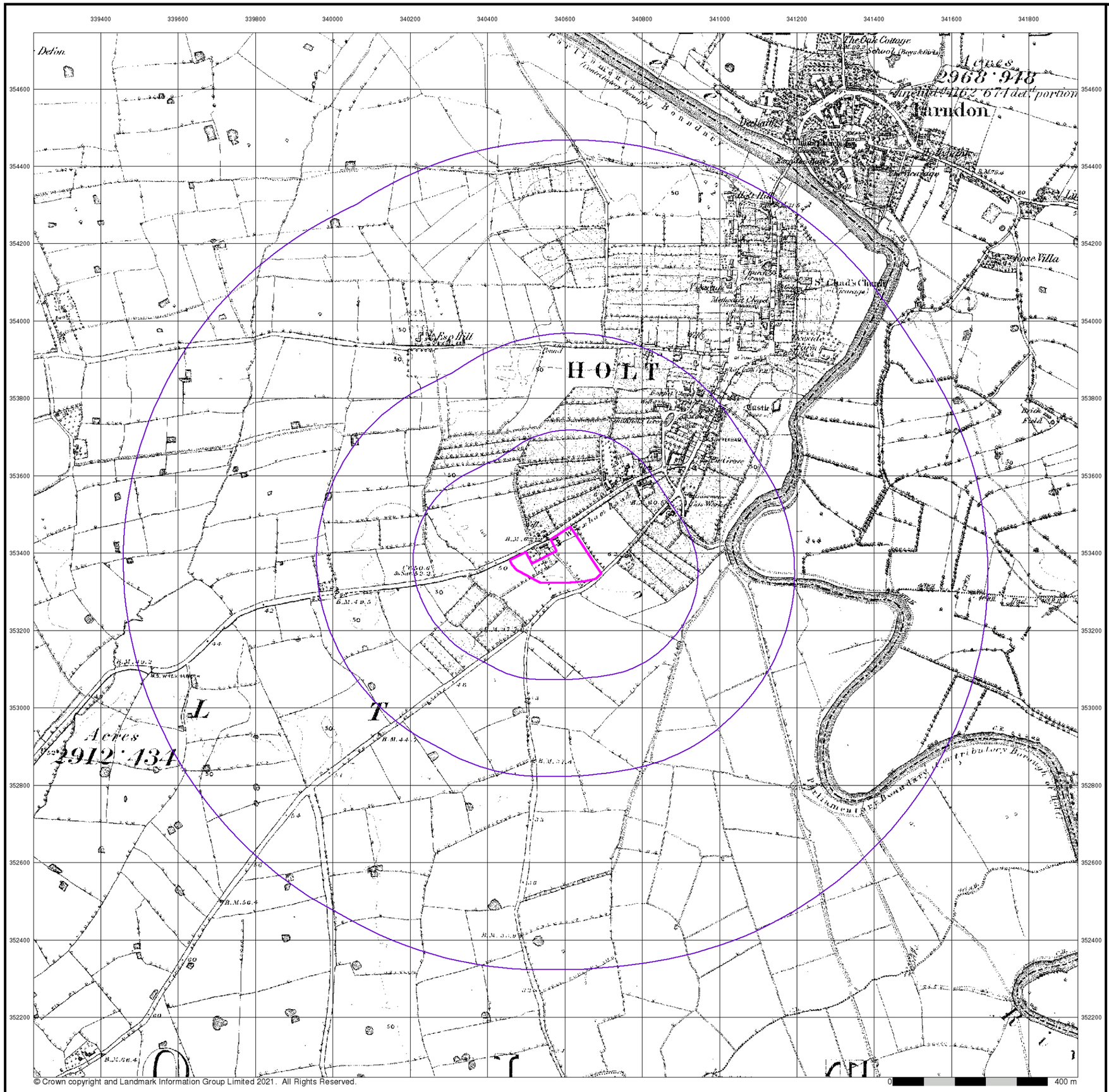
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Slice:	A
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Search Buffer (m):	1000

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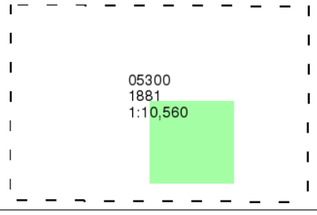
Cheshire

Published 1881

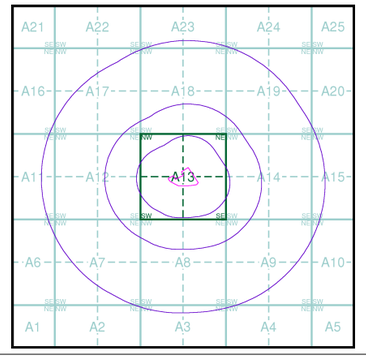
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



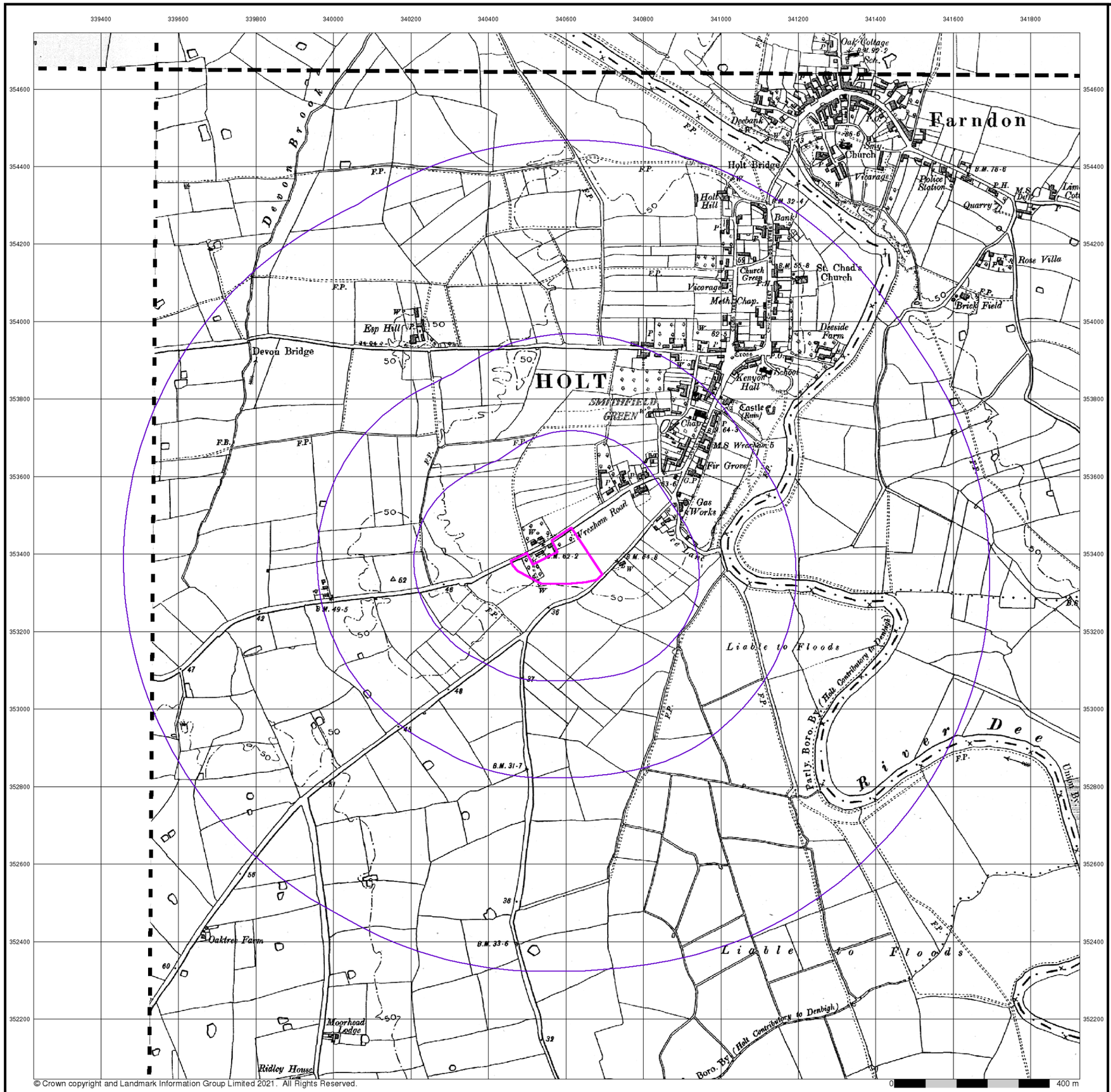
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National Grid Reference:	340580, 353380
Slice:	A
Site Area (Ha):	1.76
Search Buffer (m):	1000

Site Details

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Cheshire

Published 1899 - 1900

Source map scale - 1:10,560

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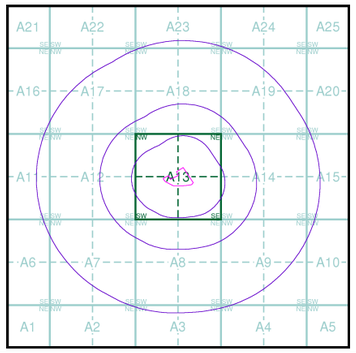
Map Name(s) and Date(s)

053NW
1900
1:10,560

053NE
1899
1:10,560

053SE
1900
1:10,560

Historical Map - Slice A



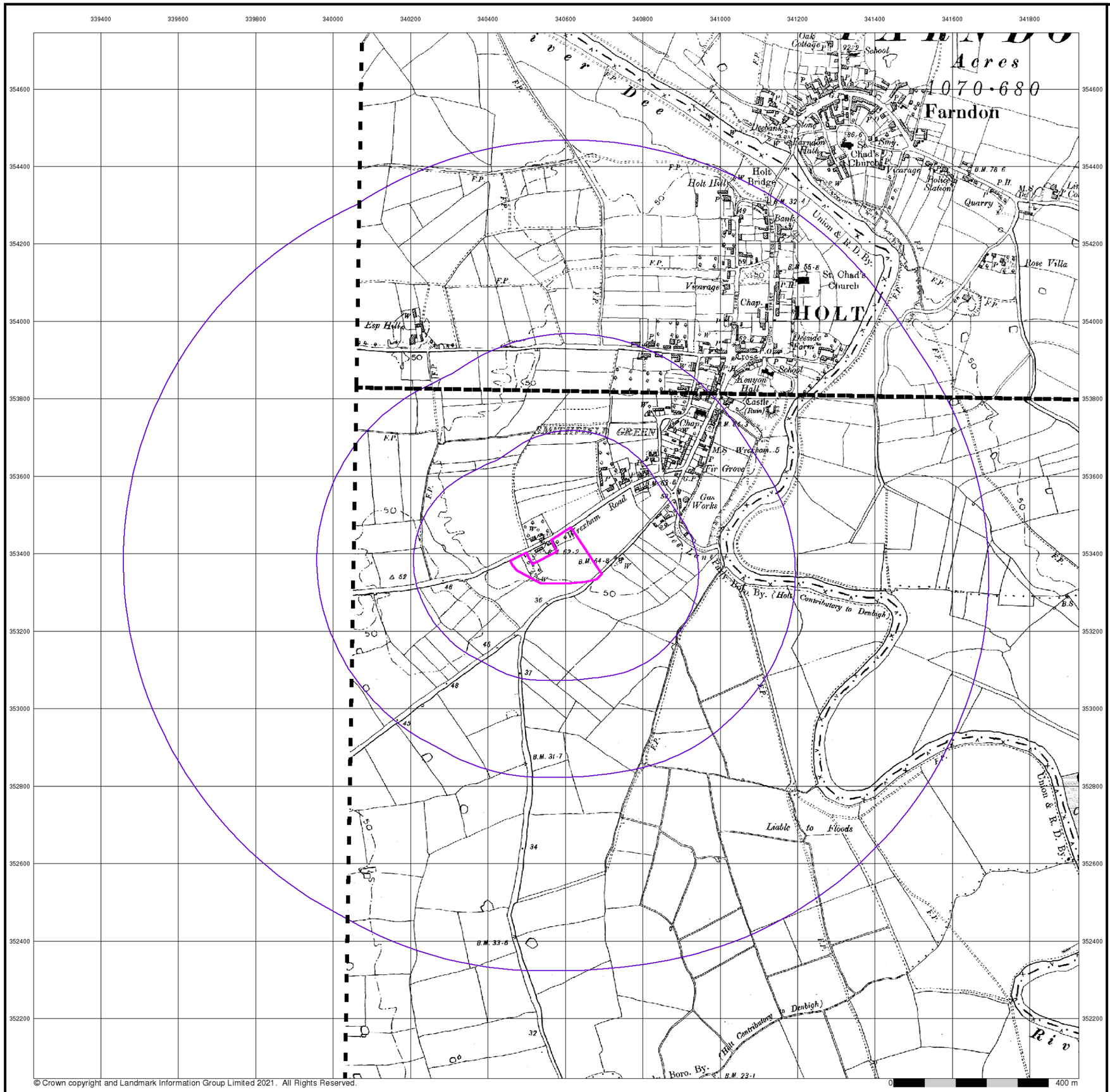
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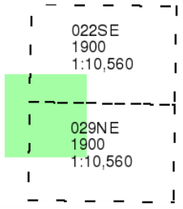
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Published 1900

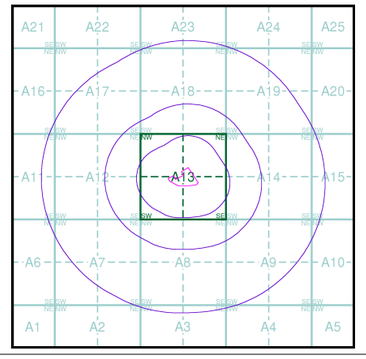
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Map Name(s) and Date(s)



Historical Map - Slice A



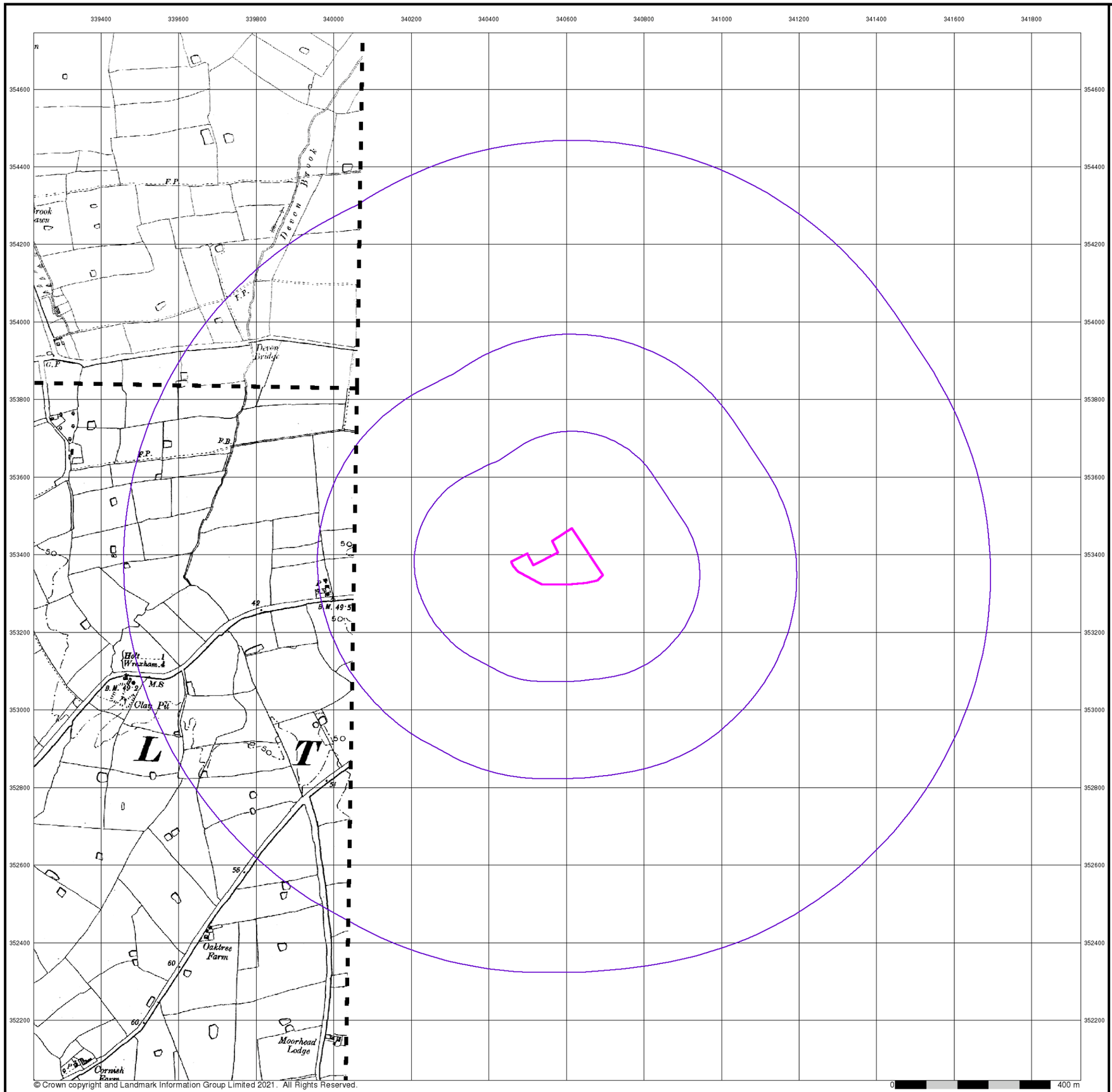
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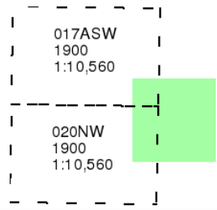
Flintshire

Published 1900

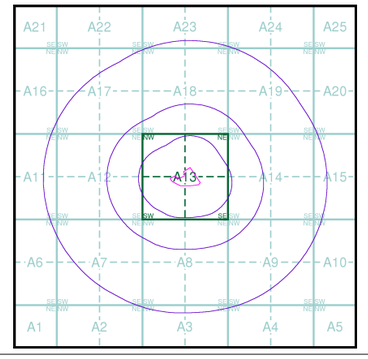
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Historical Map - Slice A



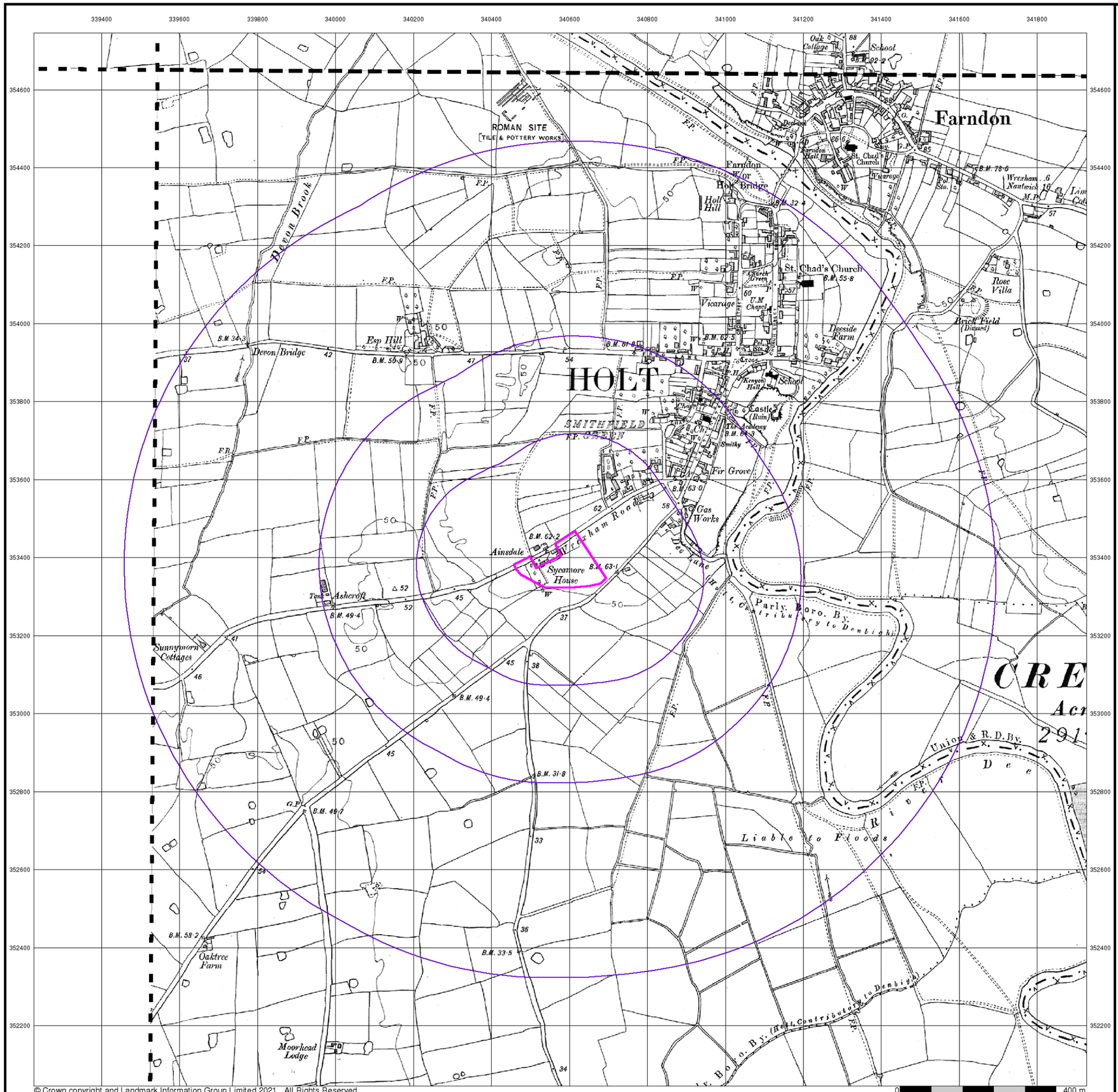
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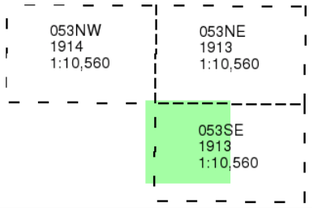
Cheshire

Published 1913 - 1914

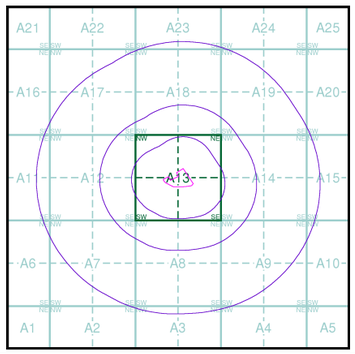
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Map Name(s) and Date(s)



Historical Map - Slice A



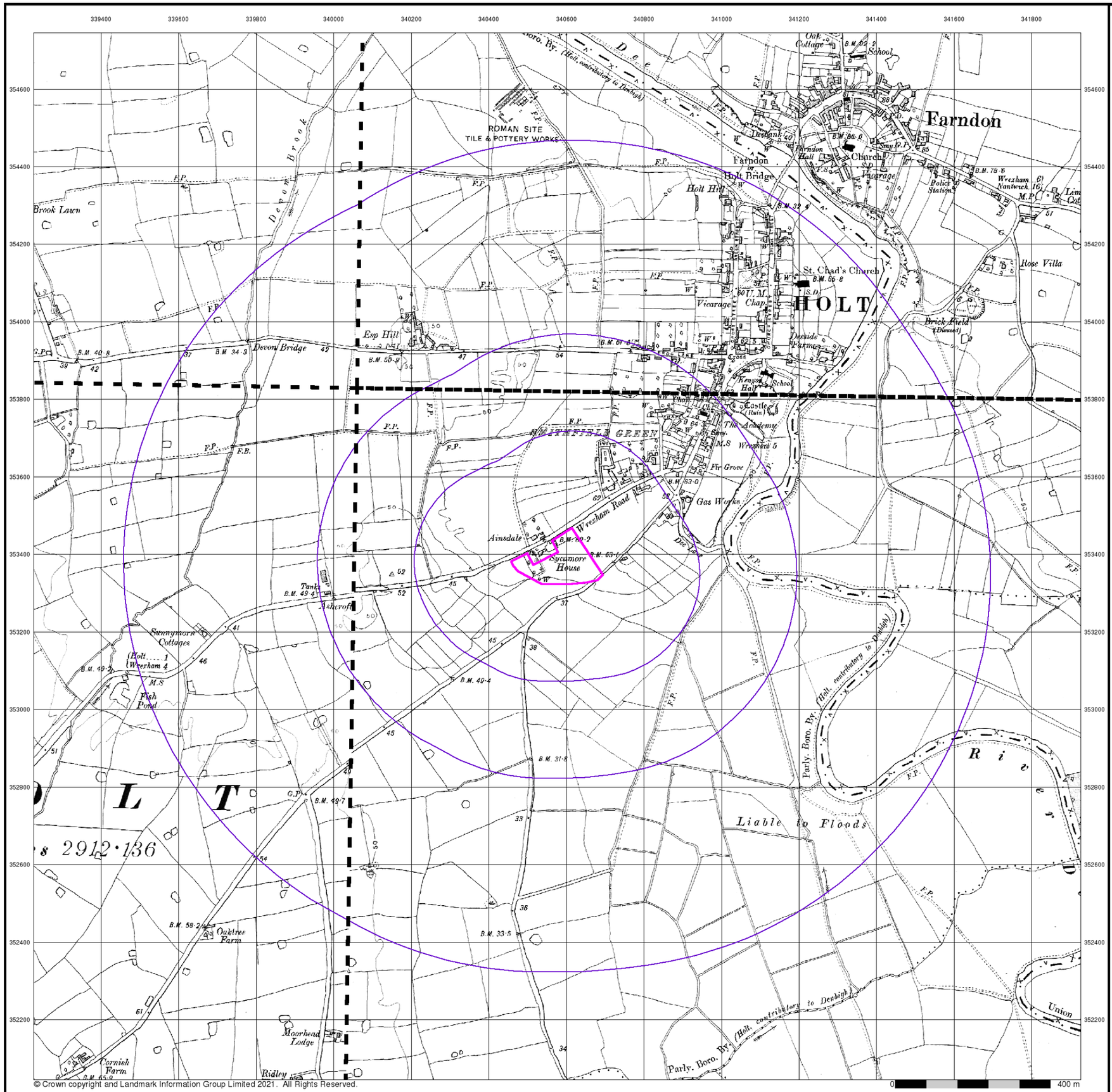
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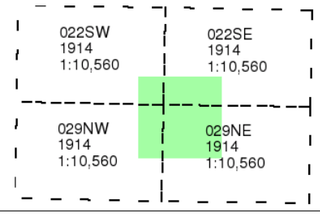
Denbighshire

Published 1914

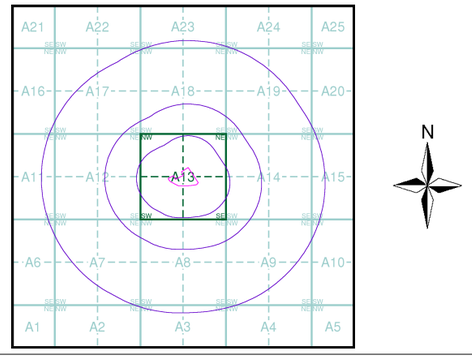
Source map scale - 1:10,560

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Map Name(s) and Date(s)



Historical Map - Slice A



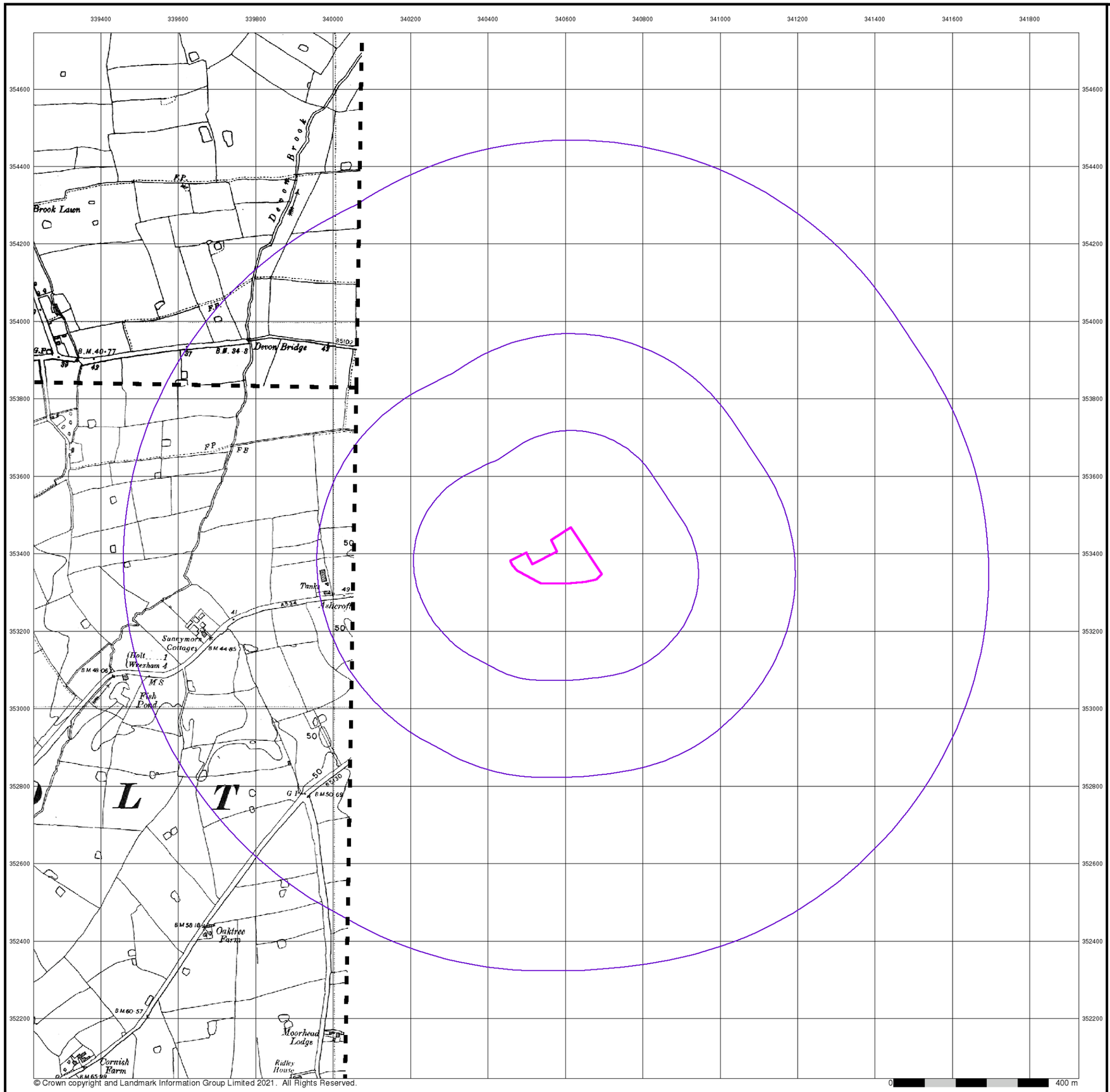
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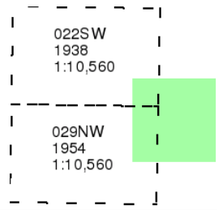
Denbighshire

Published 1938 - 1954

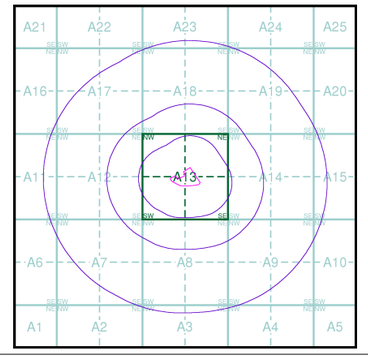
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Map Name(s) and Date(s)



Historical Map - Slice A



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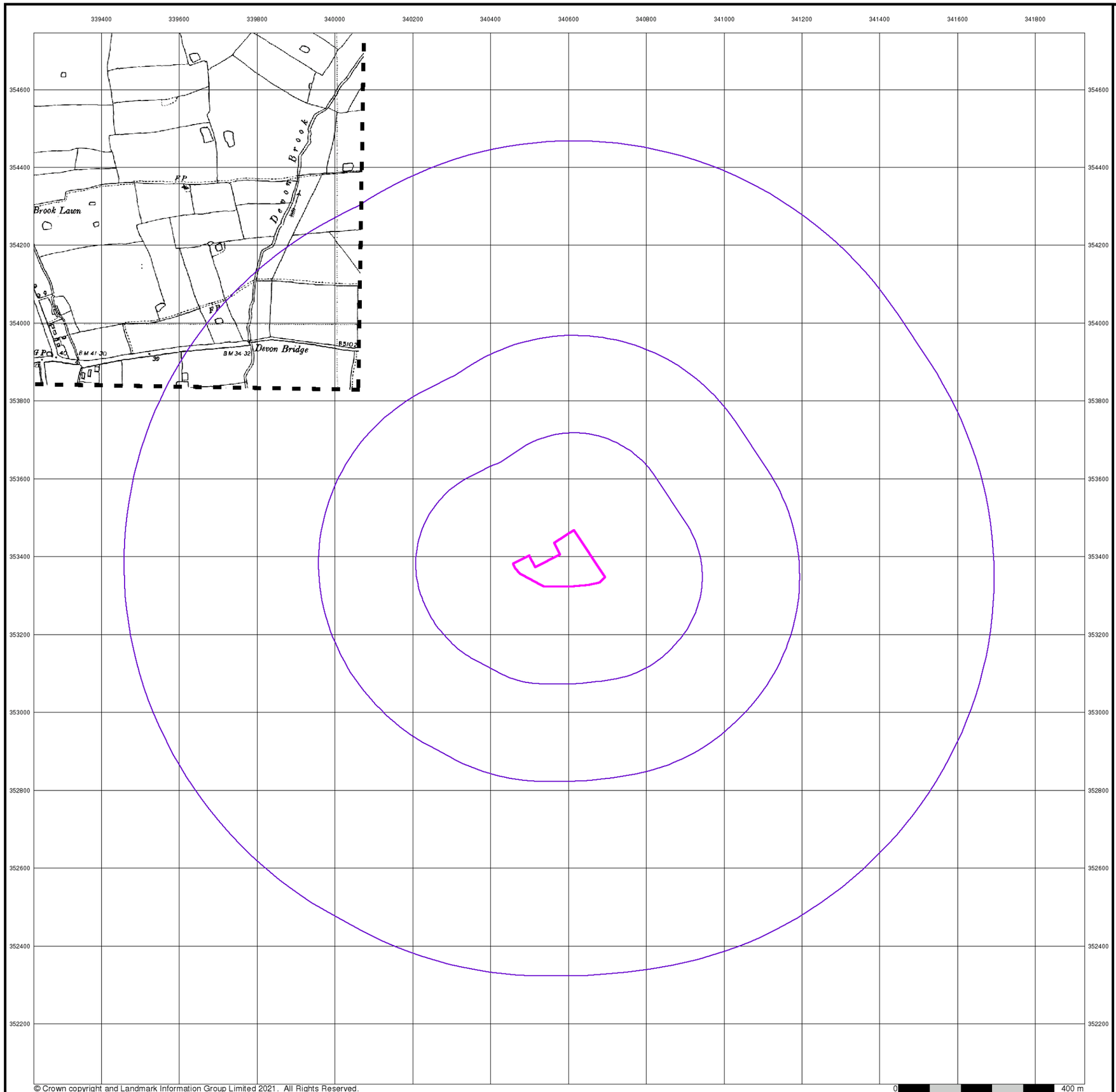
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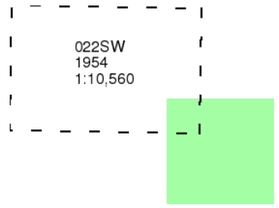
Denbighshire

Published 1954

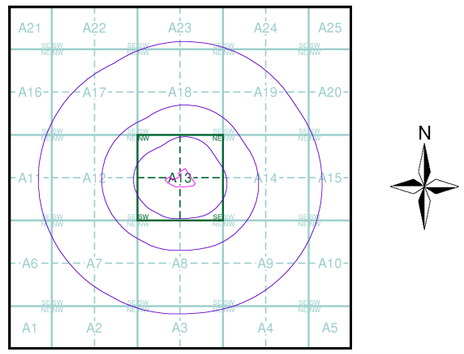
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Map Name(s) and Date(s)



Historical Map - Slice A



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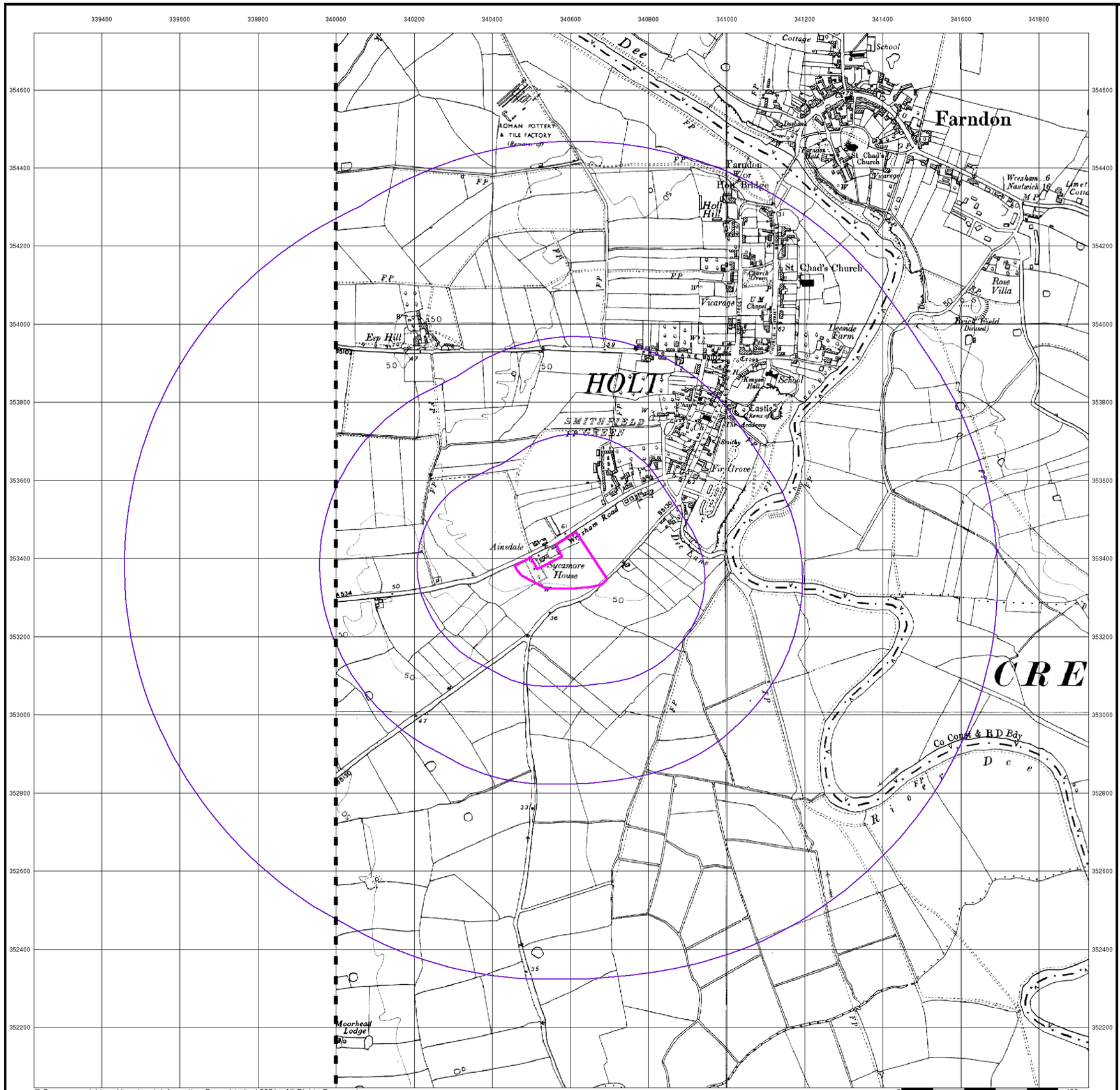
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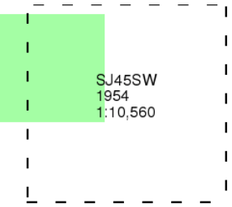
Ordnance Survey Plan

Published 1954

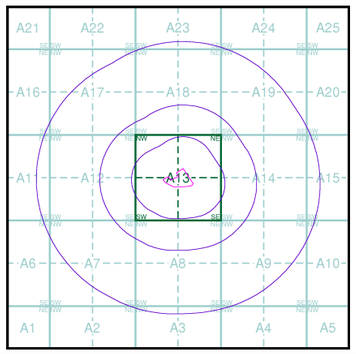
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Map Name(s) and Date(s)



Historical Map - Slice A



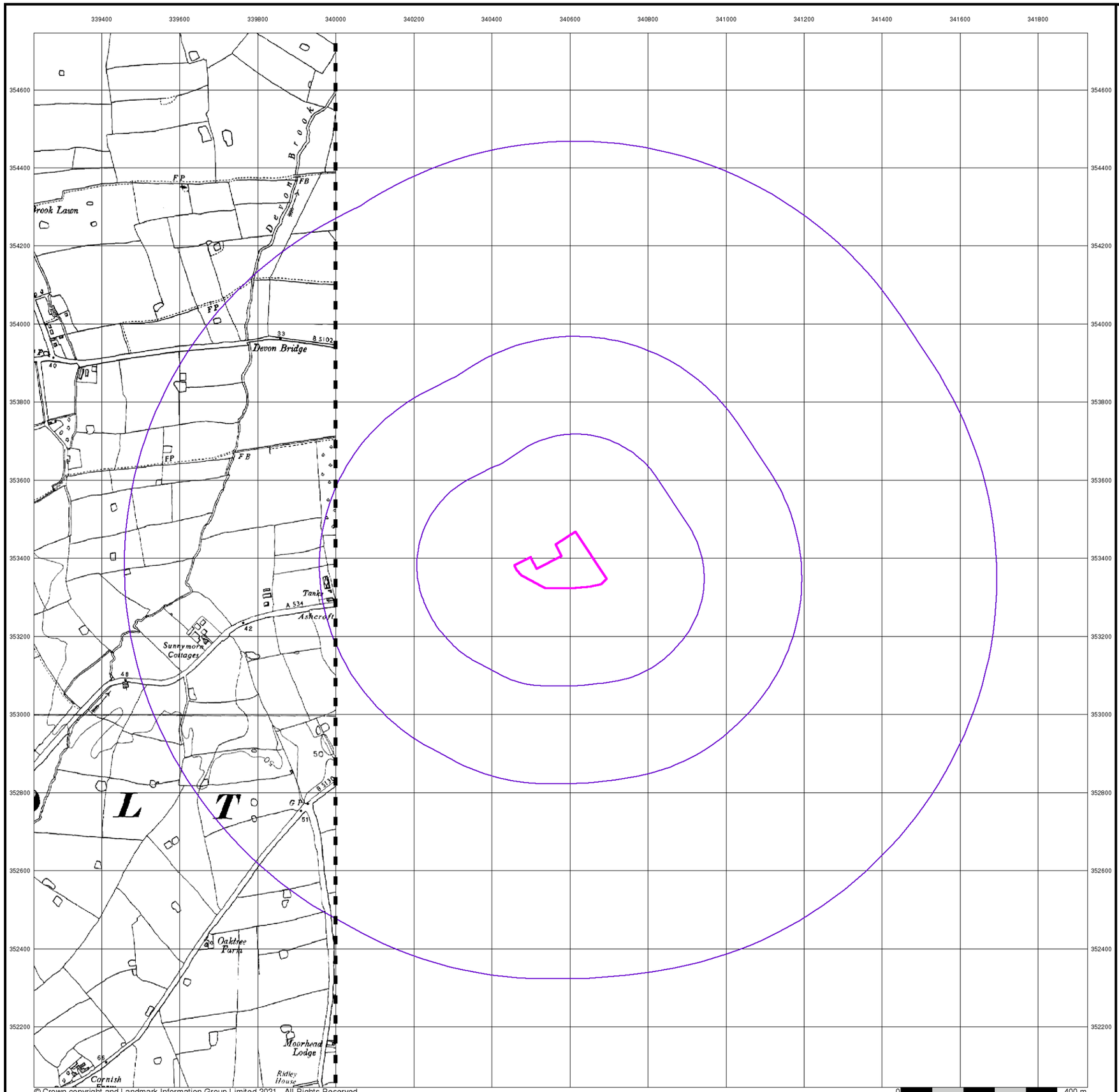
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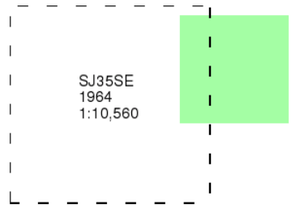
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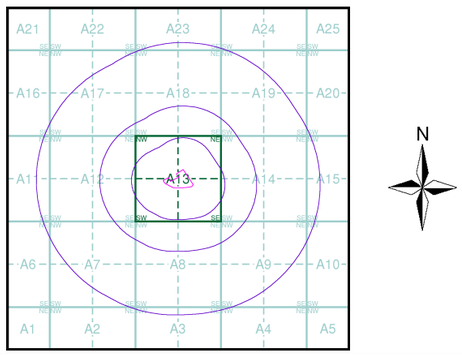
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Map Name(s) and Date(s)



Historical Map - Slice A



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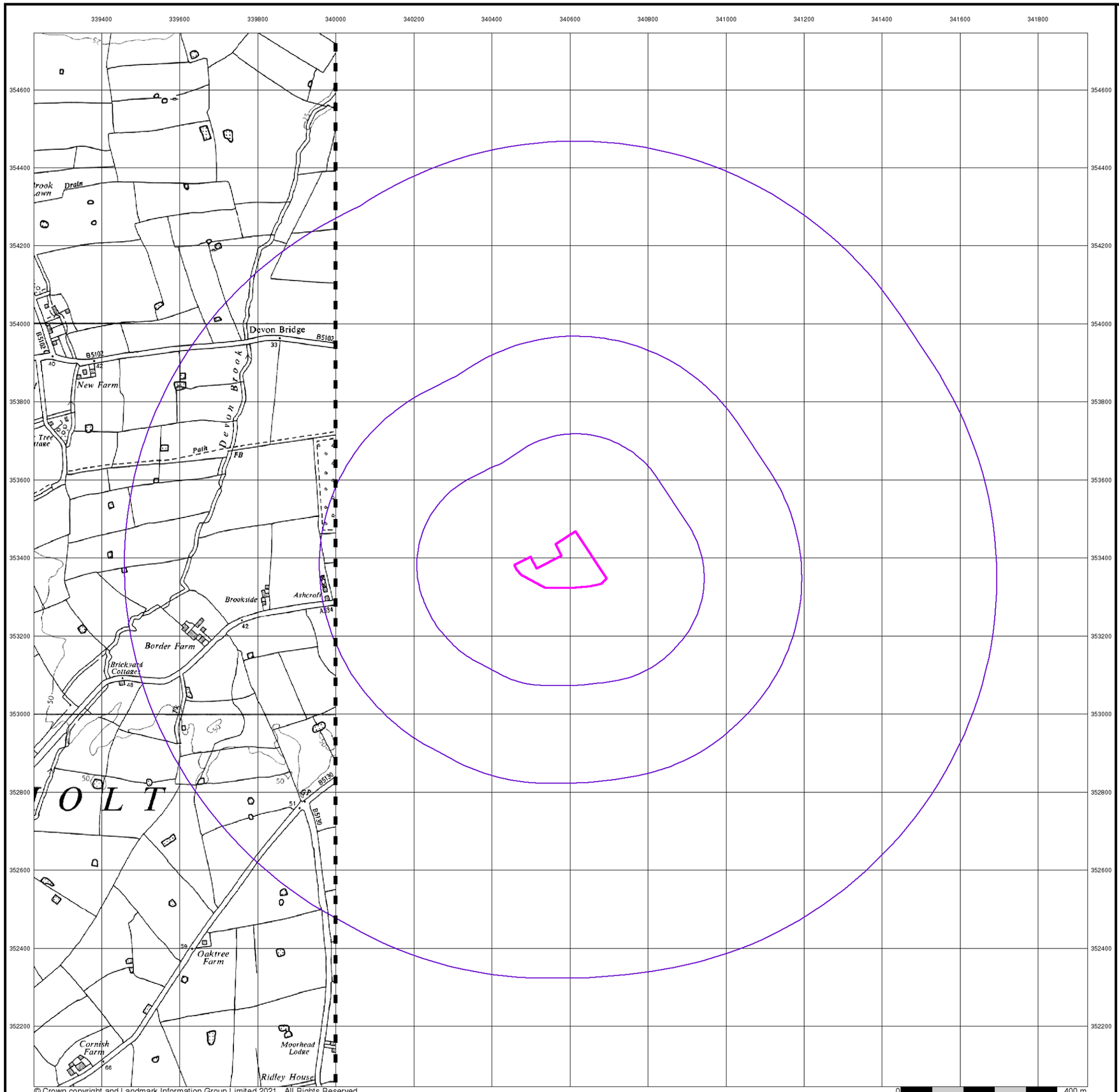
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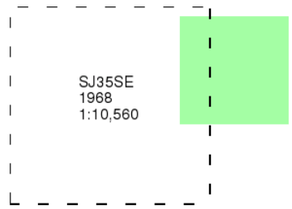
Ordnance Survey Plan

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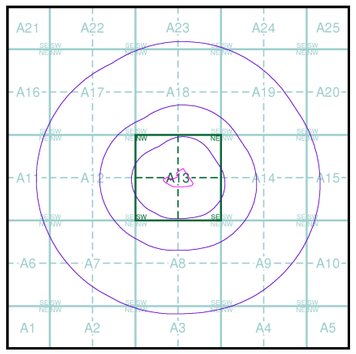
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

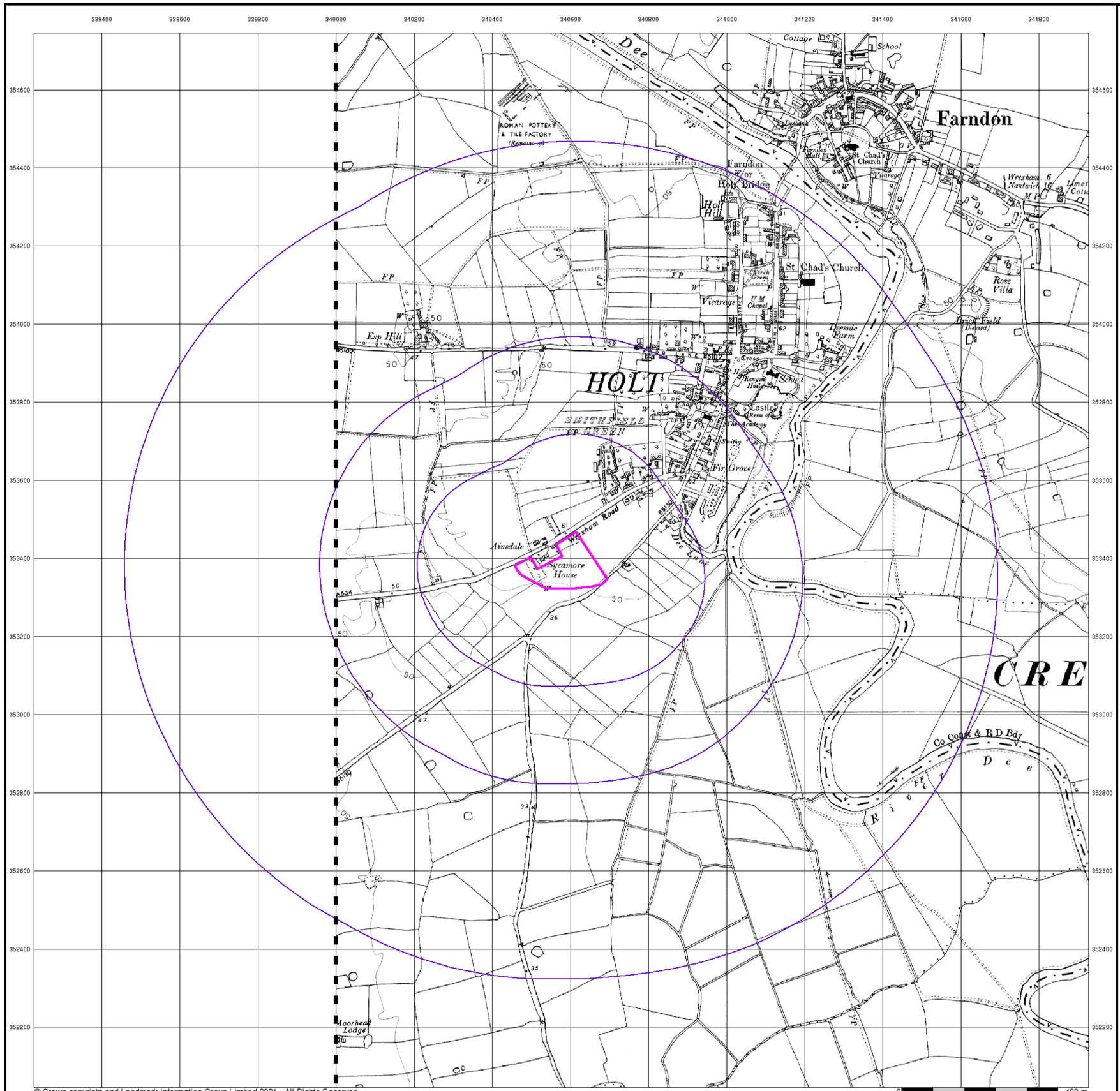
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Customer Ref:	14-608 IM A
National Grid Reference:	340580, 353380
Slice:	A
Site Area (Ha):	1.76
Search Buffer (m):	1000

Site Details

Wrexham Road, Holt, WREXHAM, LL13 9YU

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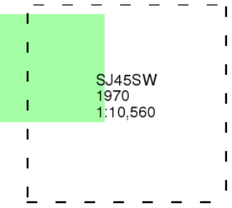
Ordnance Survey Plan

Published 1970

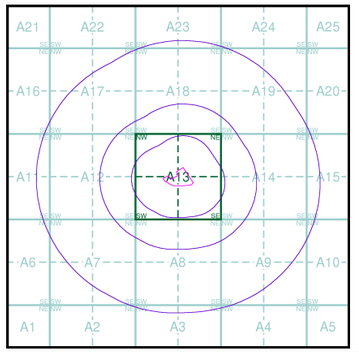
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Map Name(s) and Date(s)



Historical Map - Slice A



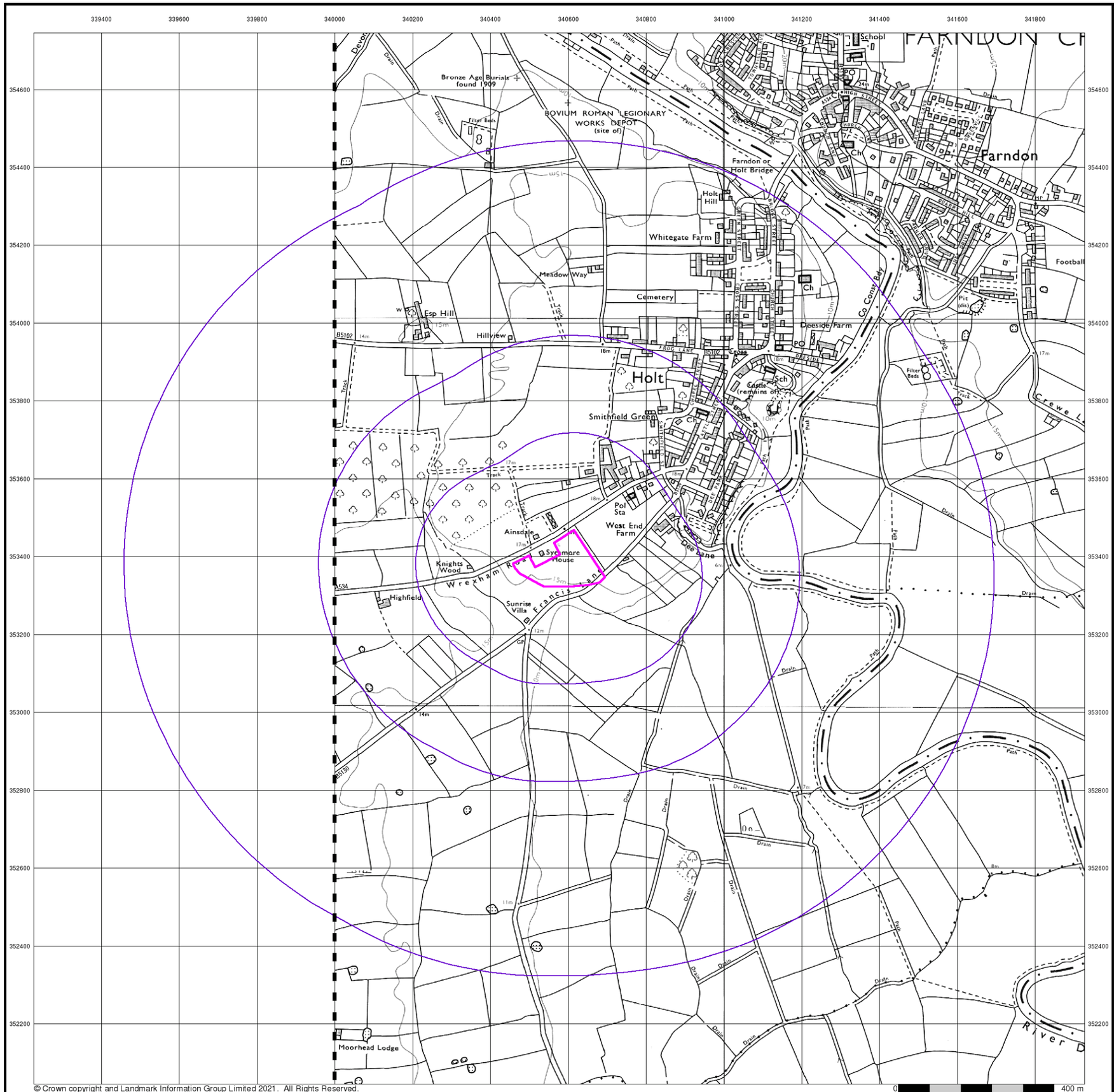
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National Grid Reference:	340580, 353380
Slice:	A
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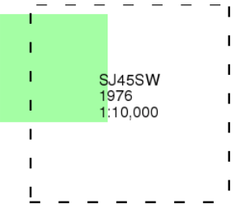
Ordnance Survey Plan

Published 1976

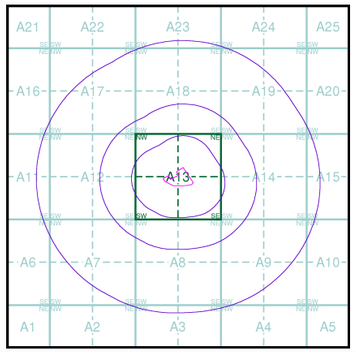
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

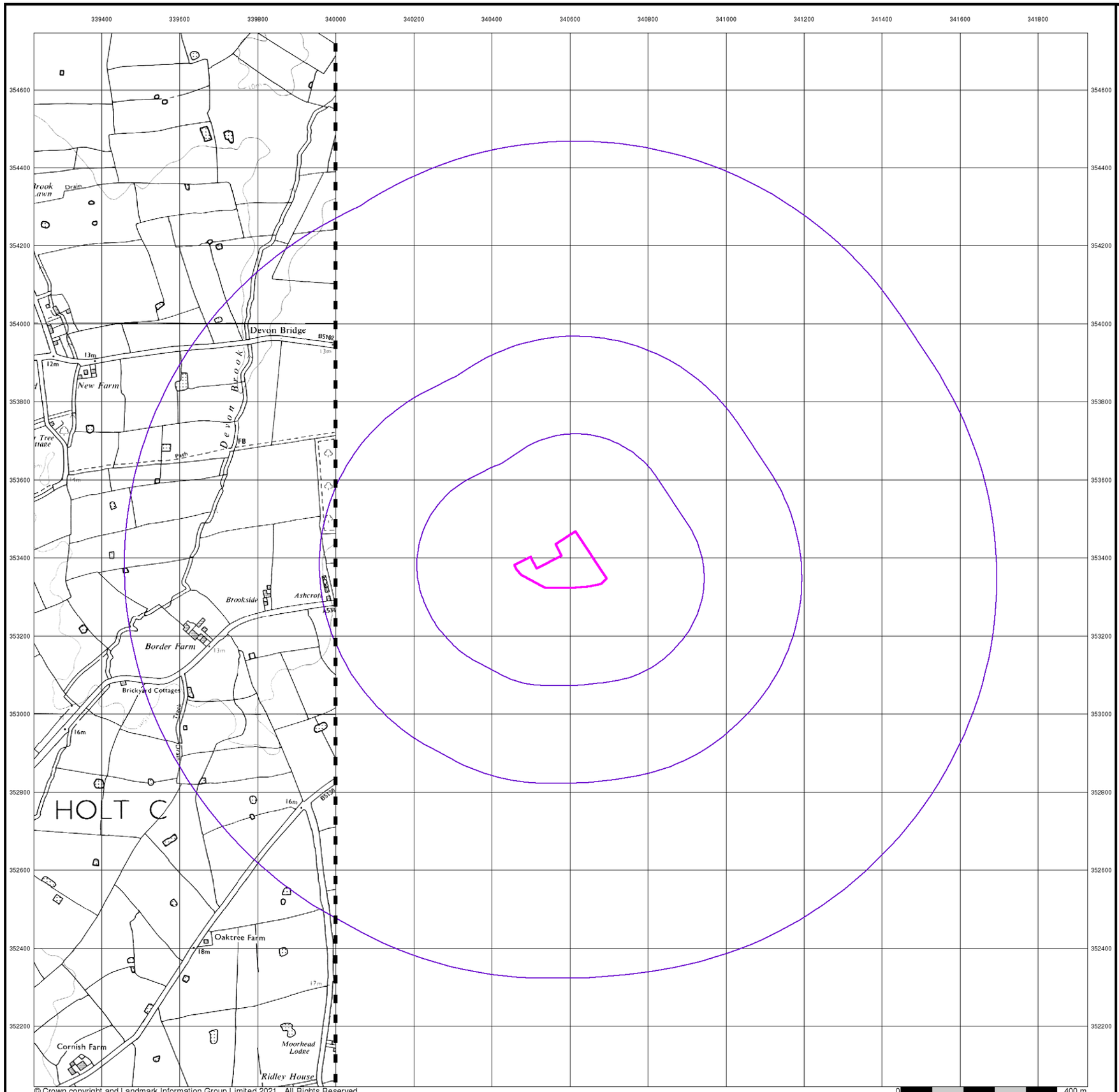
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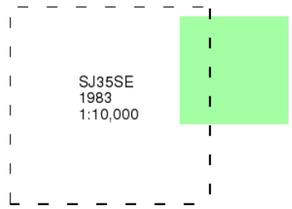
Ordnance Survey Plan

Published 1983

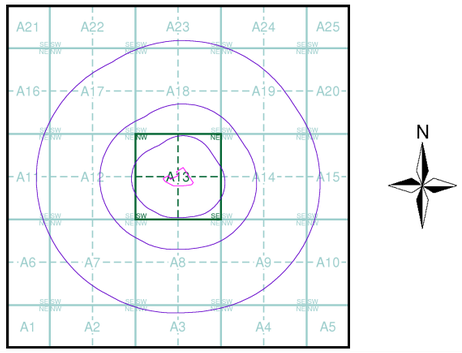
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

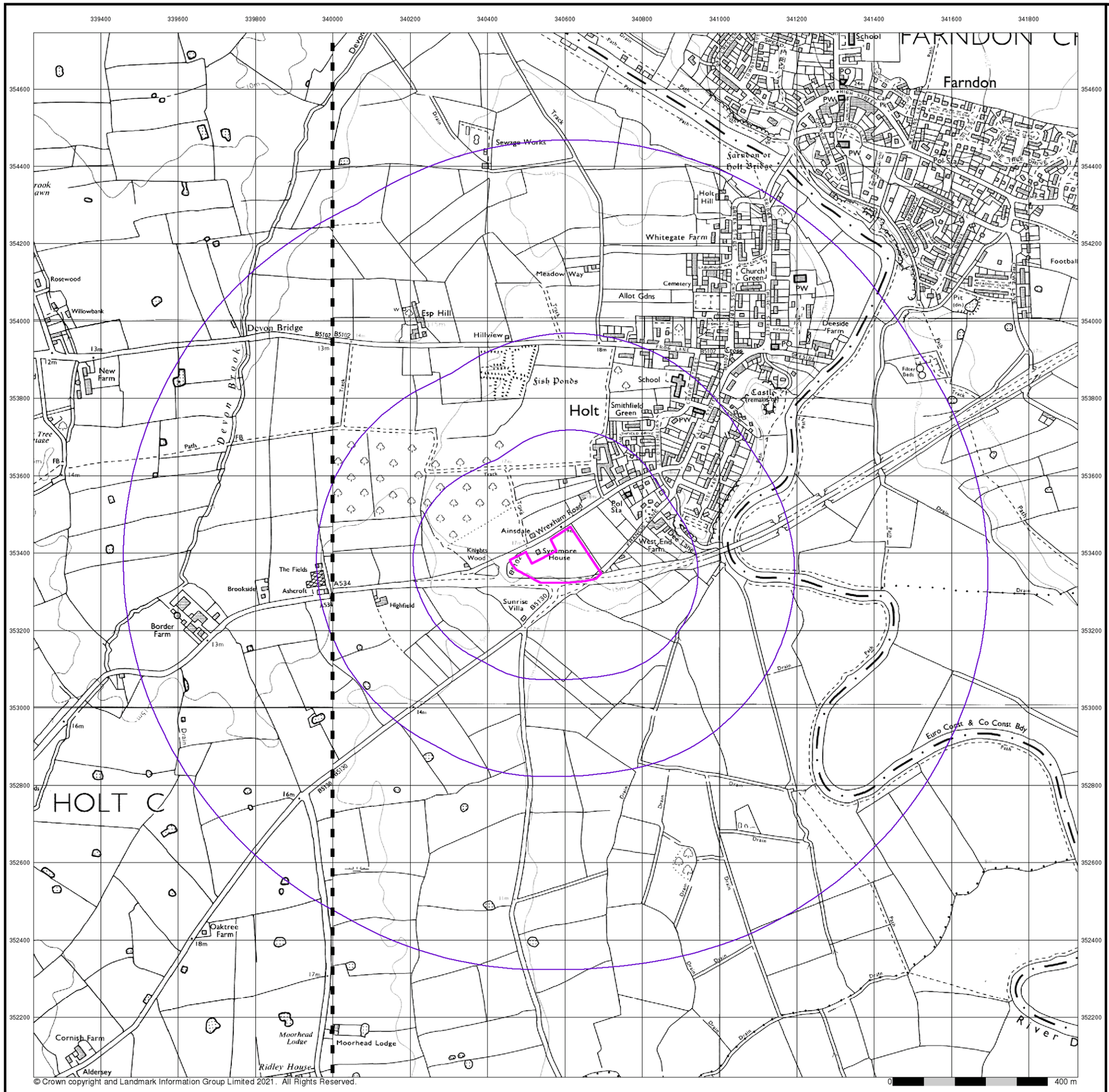
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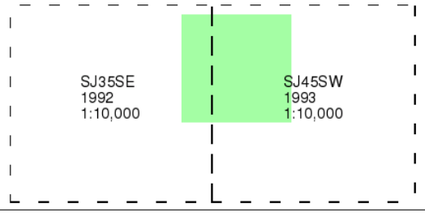
Ordnance Survey Plan

Published 1992 - 1993

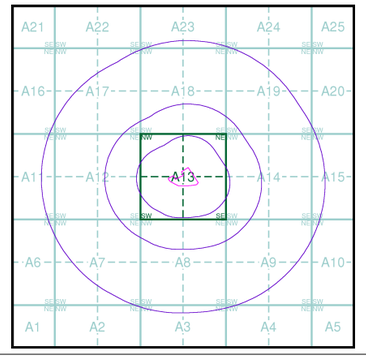
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

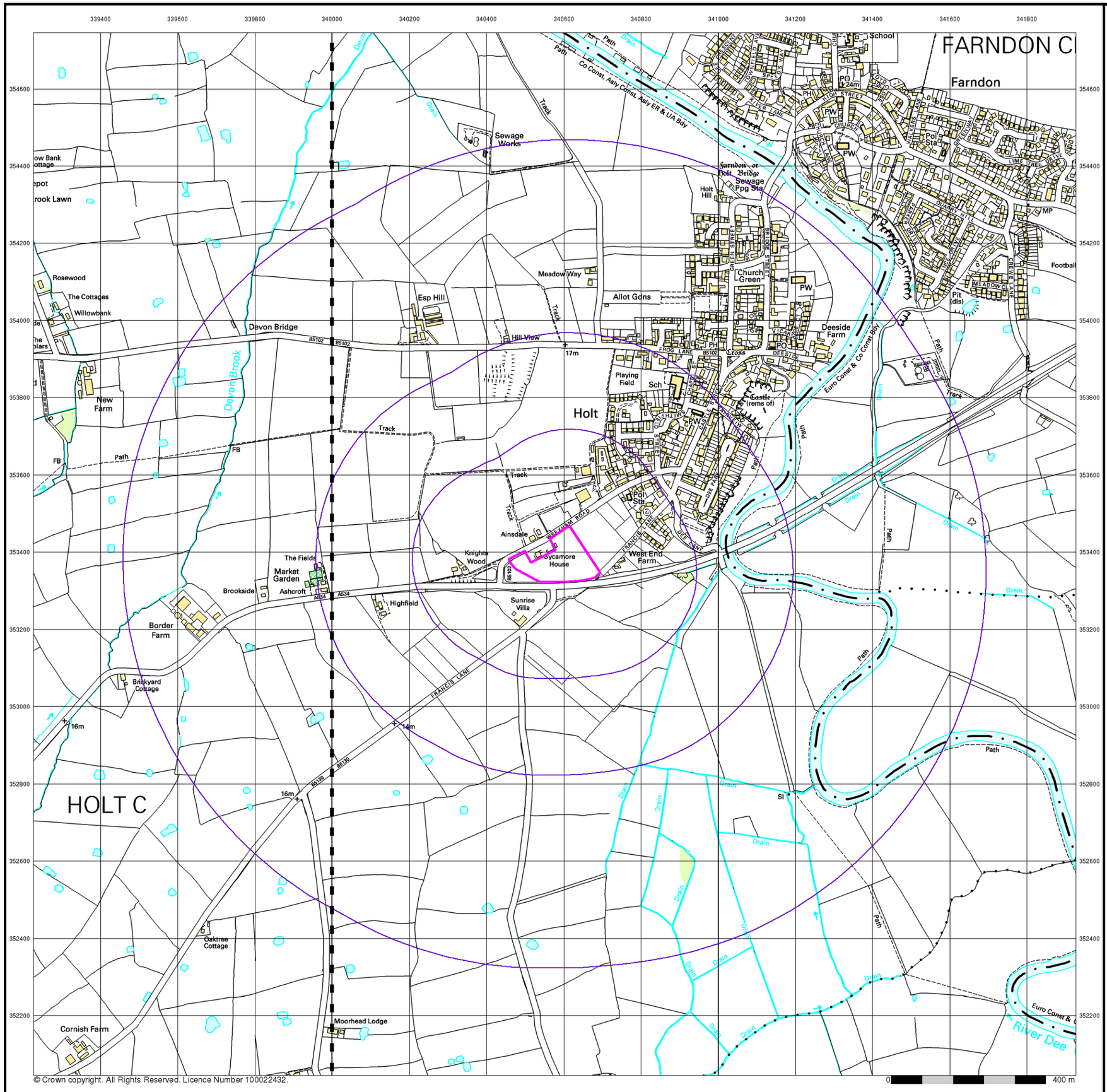
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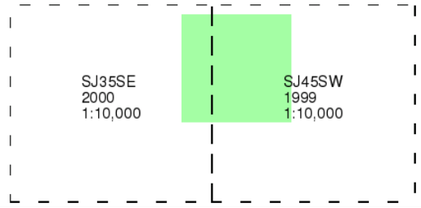
10k Raster Mapping

Published 1999 - 2000

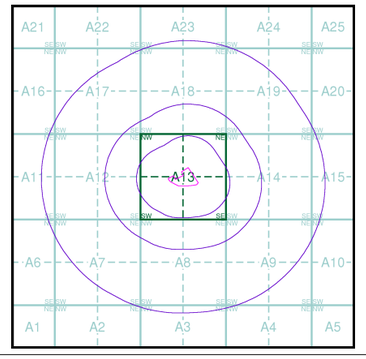
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

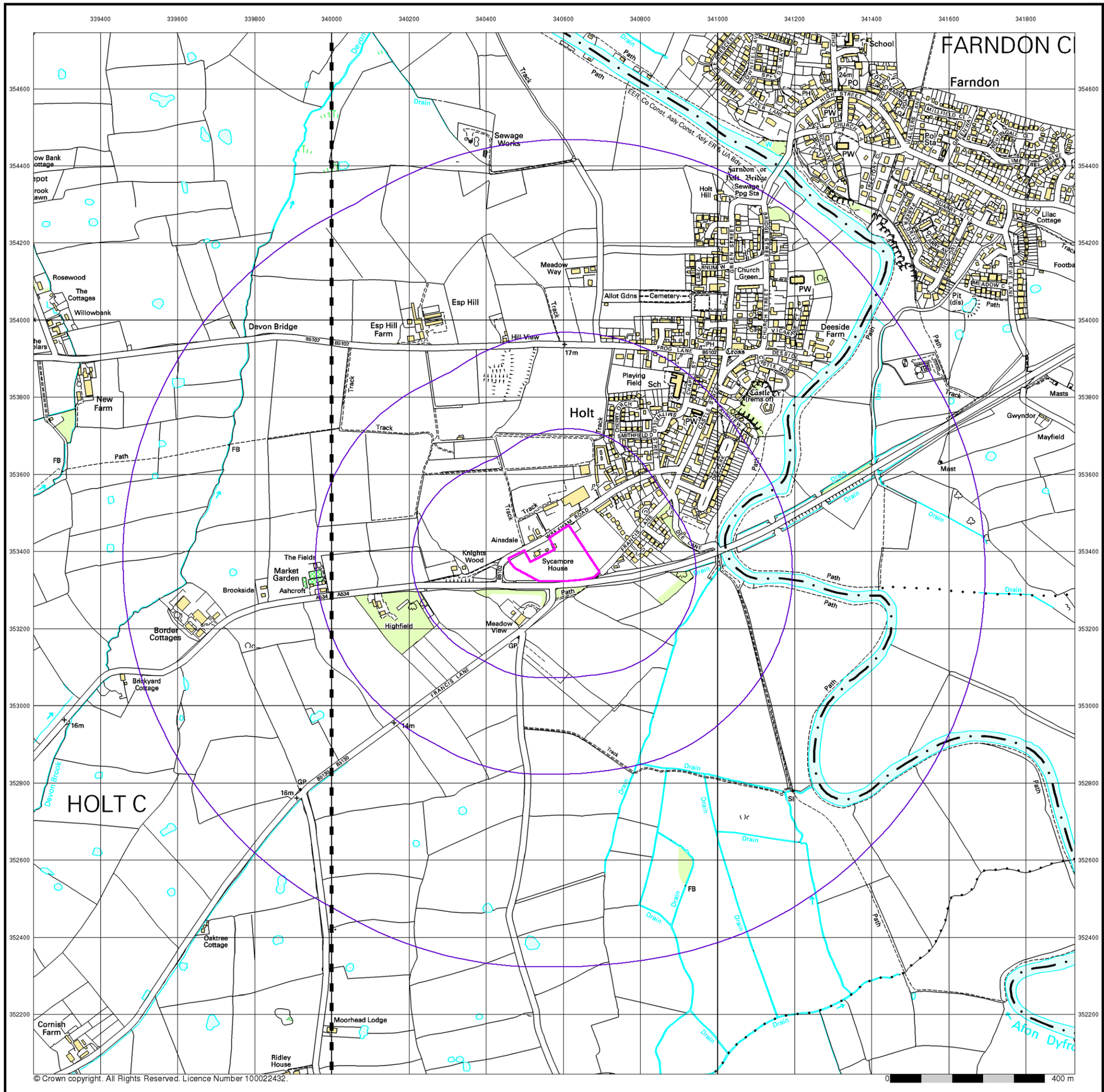
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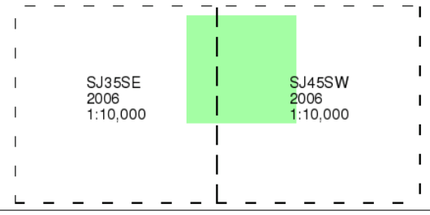
10k Raster Mapping

Published 2006

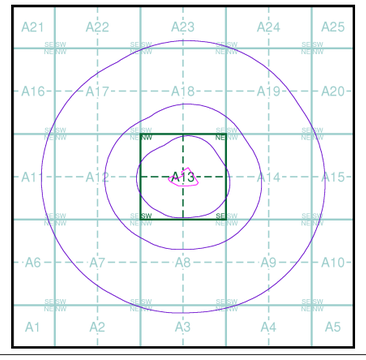
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



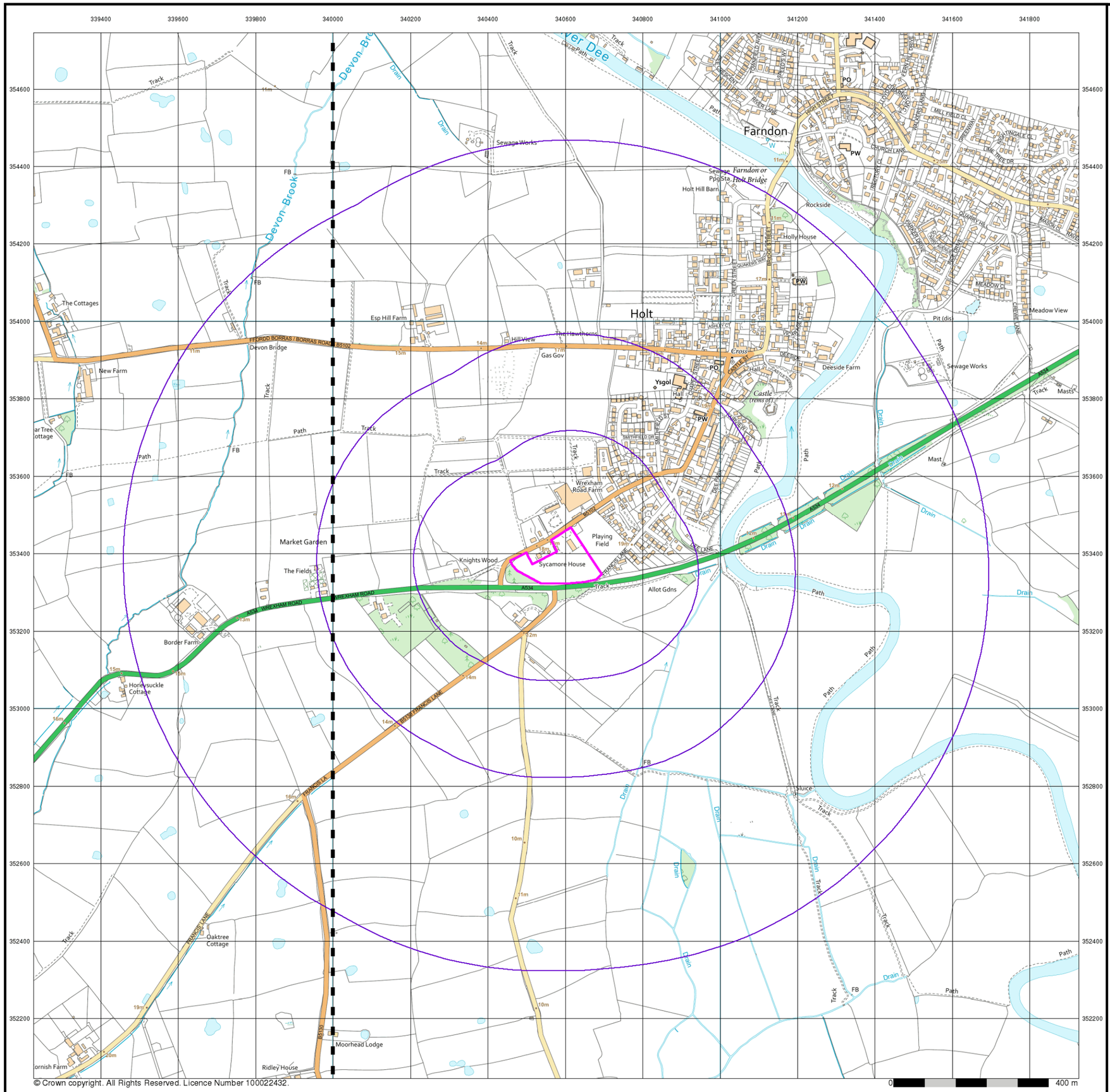
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Customer Ref:	14-608 IM A
National Grid Reference:	340580, 353380
Slice:	A
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Search Buffer (m):	1000

Site Details

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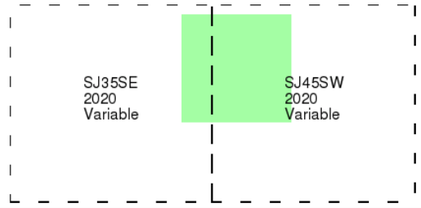
VectorMap Local

Published 2020

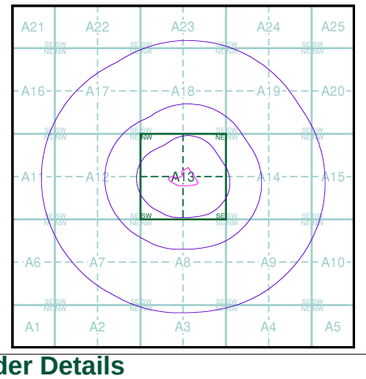
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	272013330_1_1
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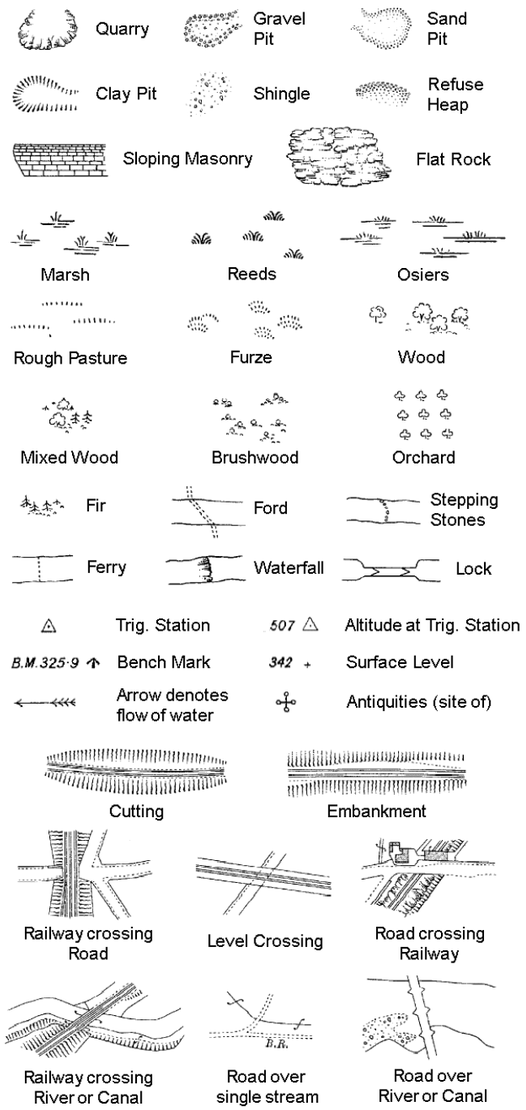
Wrexham Road, Holt, WREXHAM, LL13 9YU

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Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)

County & Civil Parish Boundary

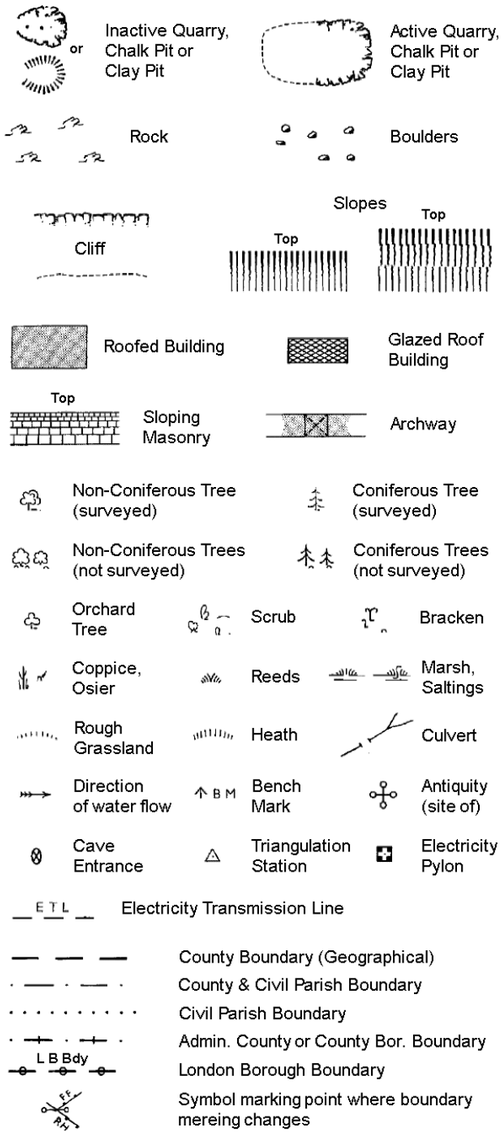
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	Sl.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

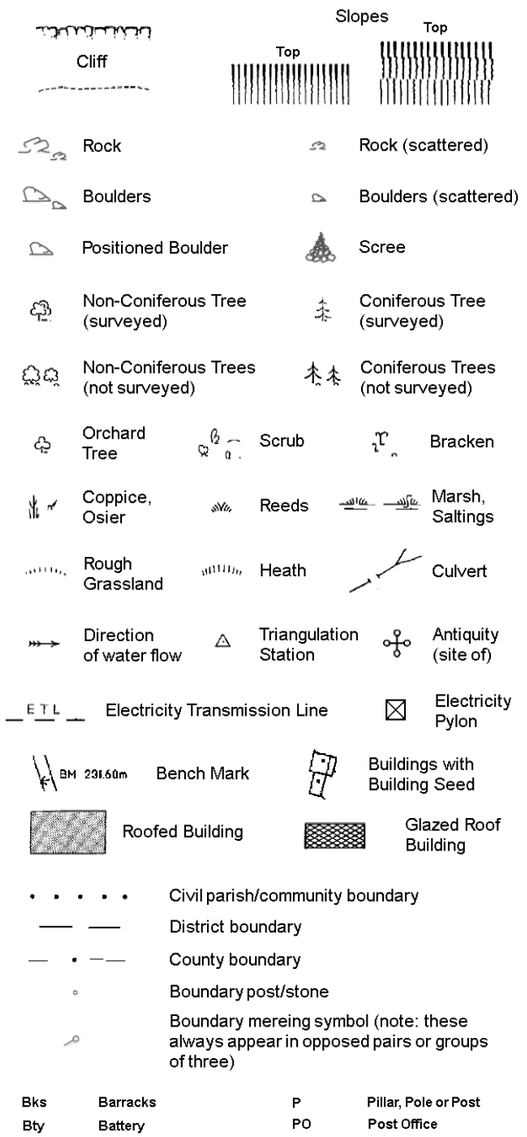
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

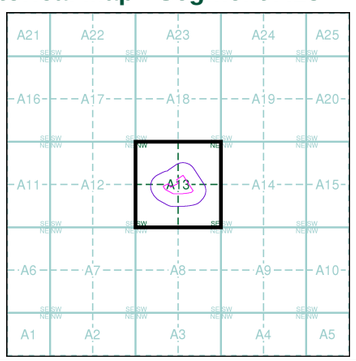
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cheshire	1:2,500	1874	2
Denbighshire	1:2,500	1886	3
Cheshire	1:2,500	1899	4
Denbighshire	1:2,500	1899	5
Denbighshire	1:2,500	1911	6
Cheshire	1:2,500	1911	7
Ordnance Survey Plan	1:2,500	1971	8
Supply of Unpublished Survey Information	1:2,500	1974	9
Additional SIMs	1:2,500	1982	10
Additional SIMs	1:2,500	1987	11
Additional SIMs	1:2,500	1987	12
Large-Scale National Grid Data	1:2,500	1993	13
Large-Scale National Grid Data	1:2,500	1994	14
Large-Scale National Grid Data	1:2,500	1996	15
Historical Aerial Photography	1:2,500	2001	16

Historical Map - Segment A13



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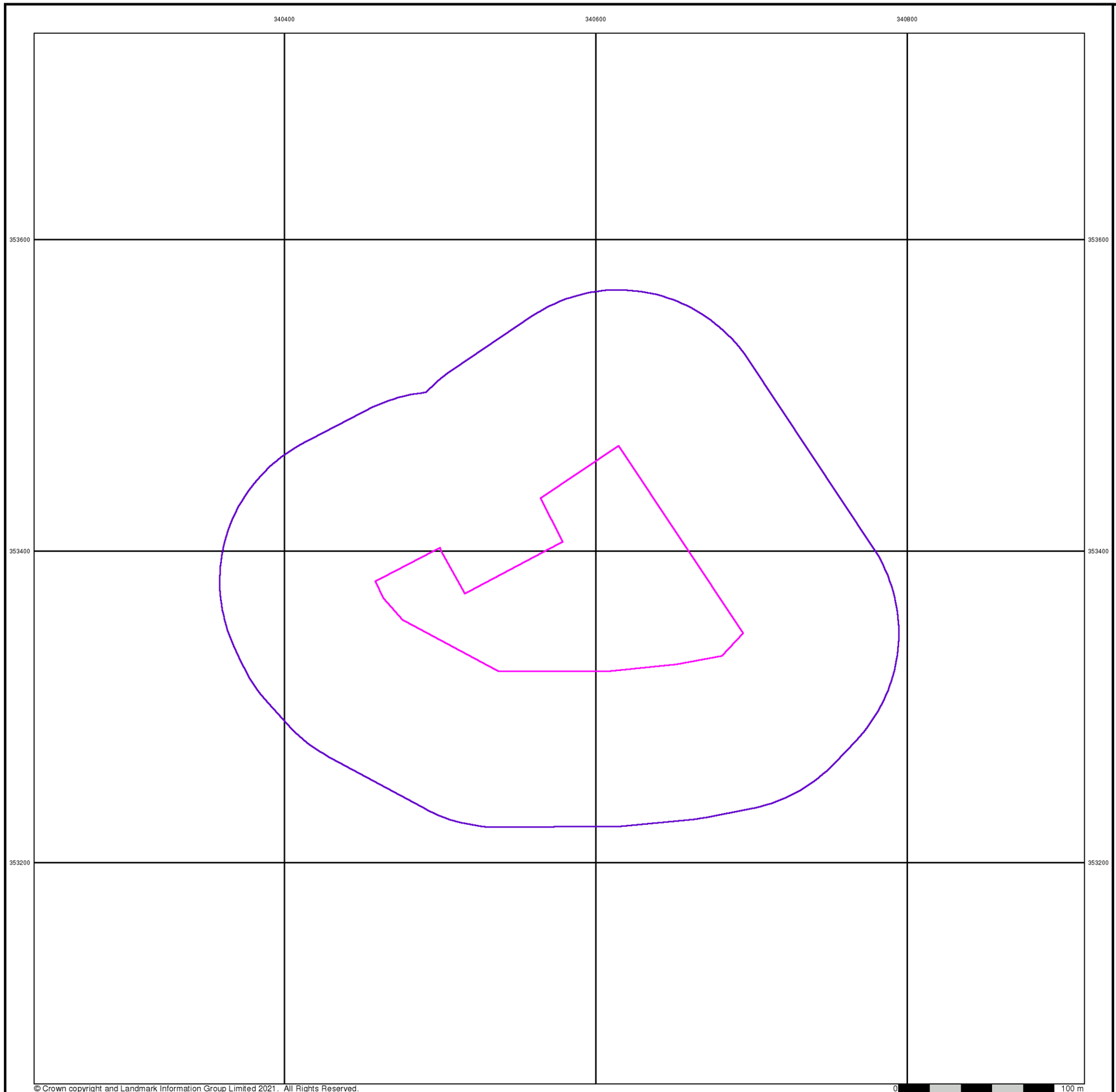
Order Number:	272013330_1_1
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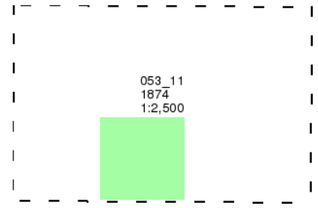
Cheshire

Published 1874

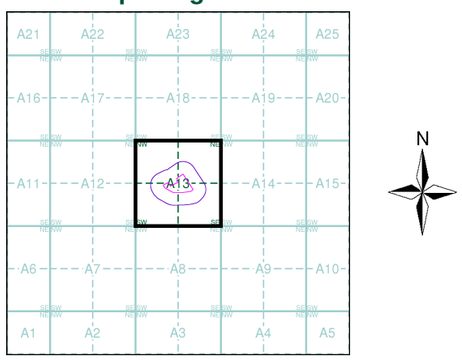
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



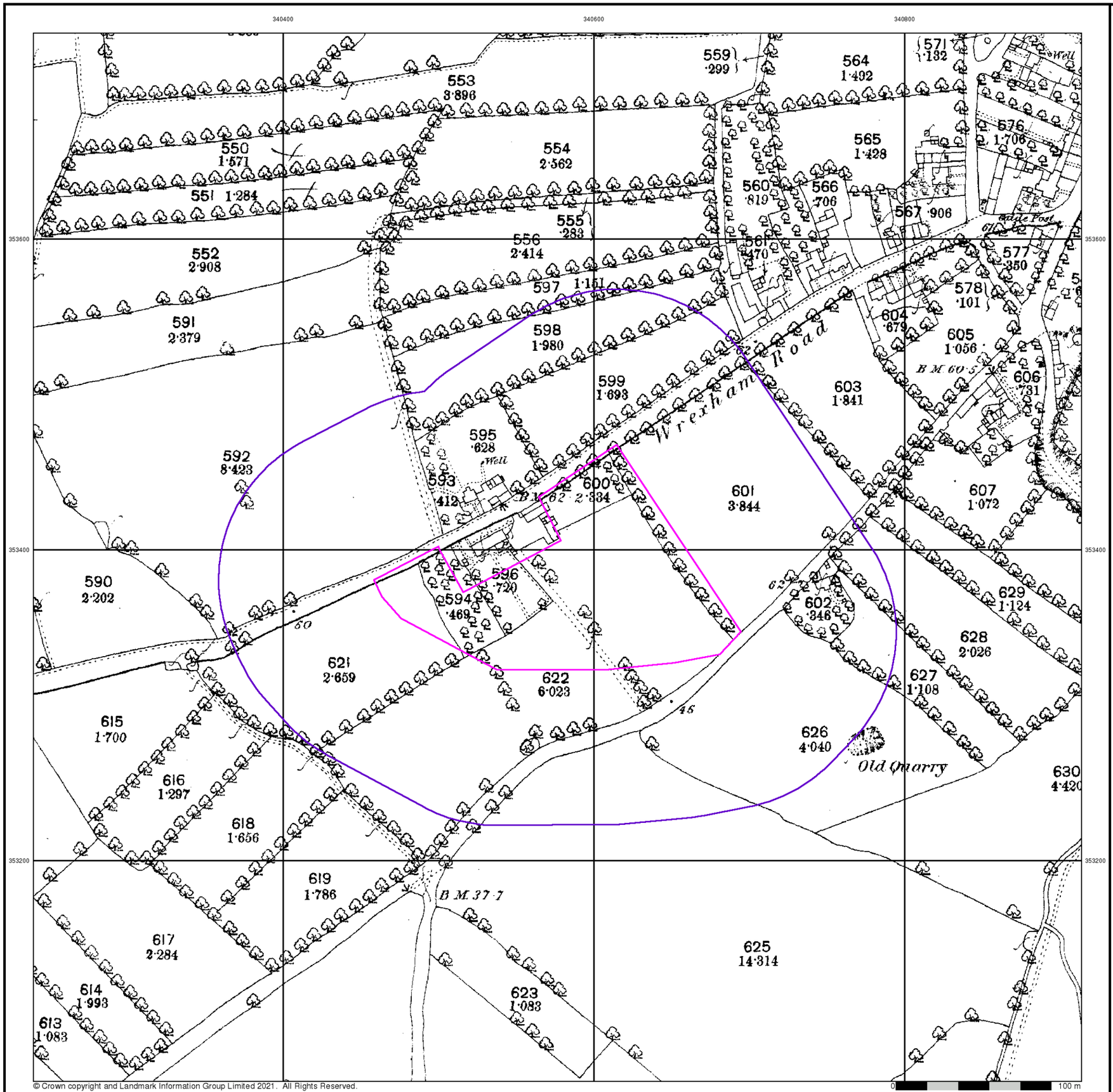
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Customer Ref:	14-608 IM A
National Grid Reference:	340580, 353380
Slice:	A
Site Area (Ha):	1.76
Search Buffer (m):	100

Site Details

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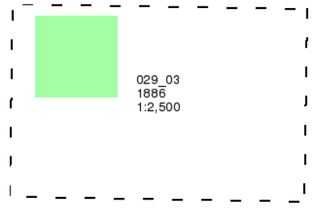
Denbighshire

Published 1886

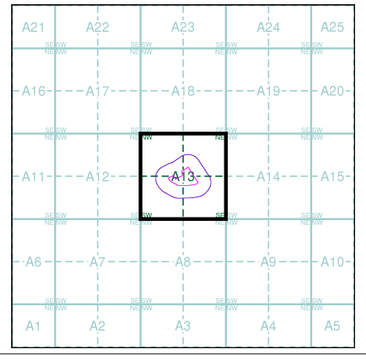
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Map Name(s) and Date(s)



Historical Map - Segment A13



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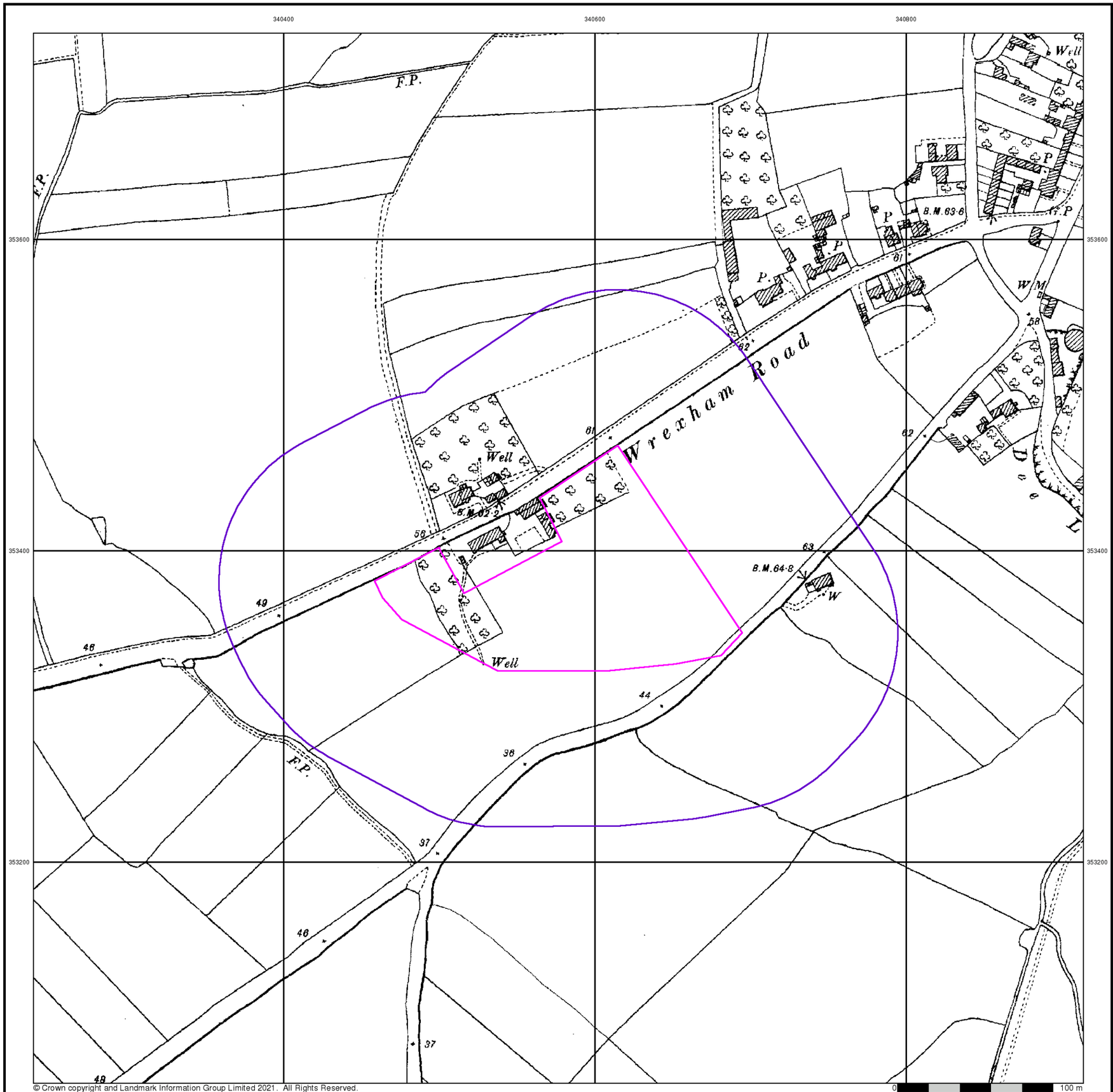
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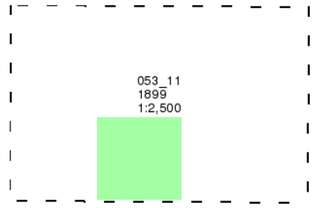
Cheshire

Published 1899

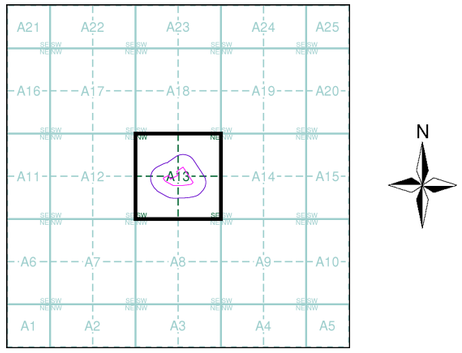
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Map Name(s) and Date(s)



Historical Map - Segment A13



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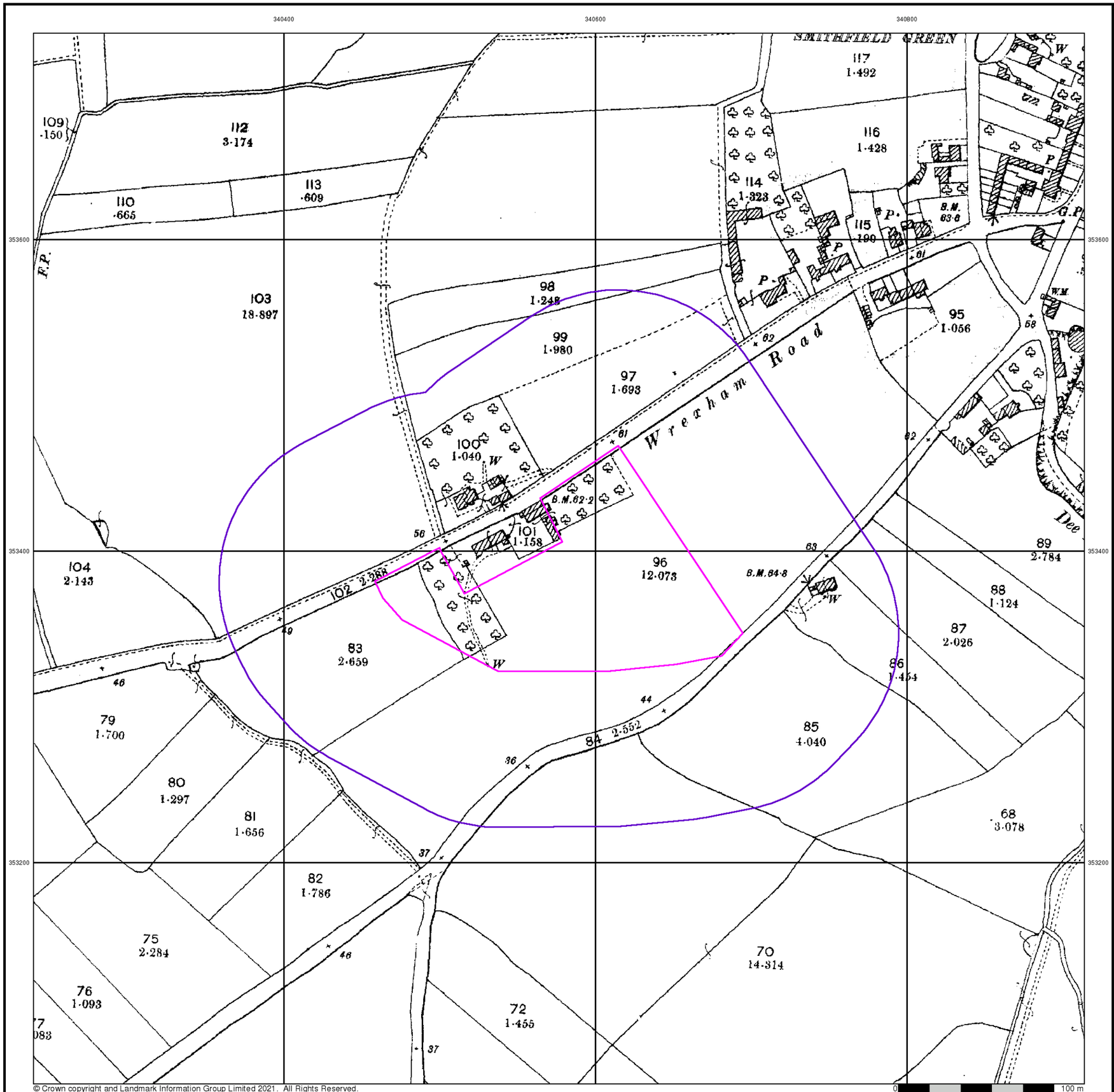
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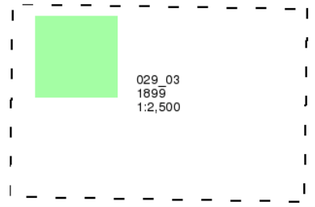
Denbighshire

Published 1899

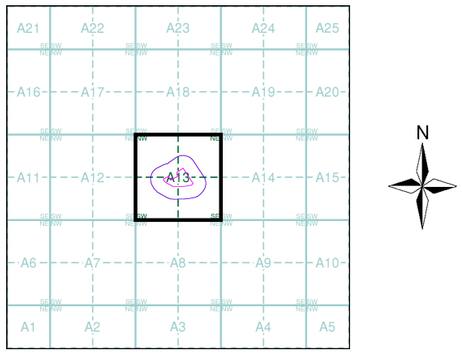
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Map Name(s) and Date(s)



Historical Map - Segment A13



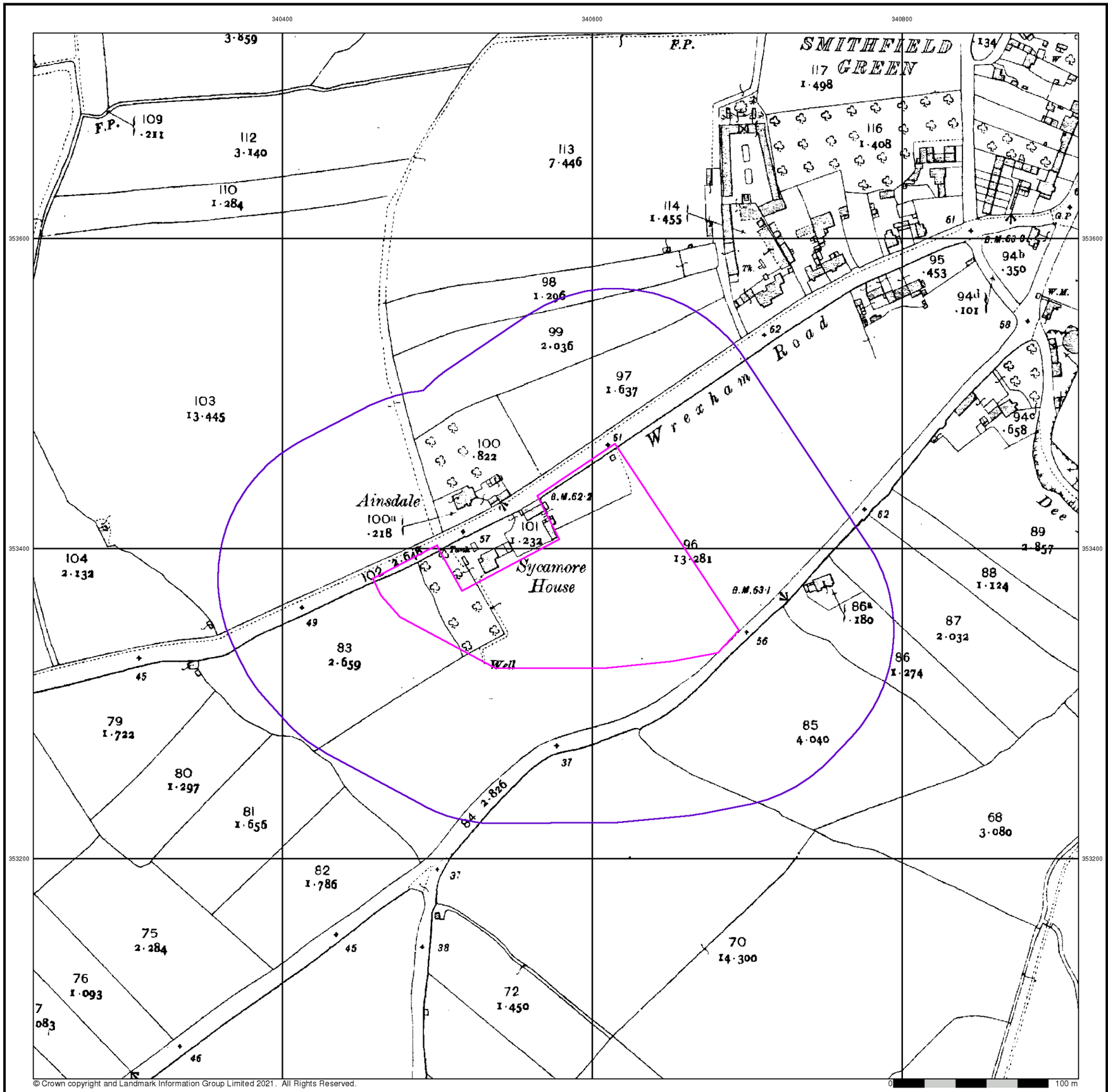
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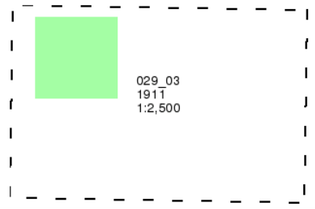
Denbighshire

Published 1911

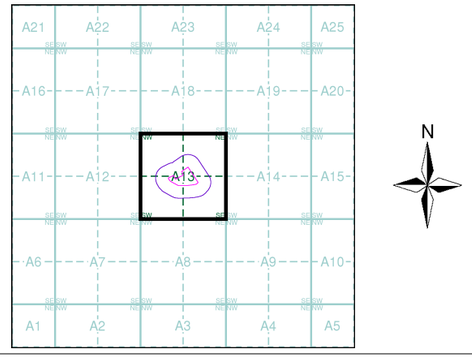
Source map scale - 1:2,500

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Historical Map - Segment A13



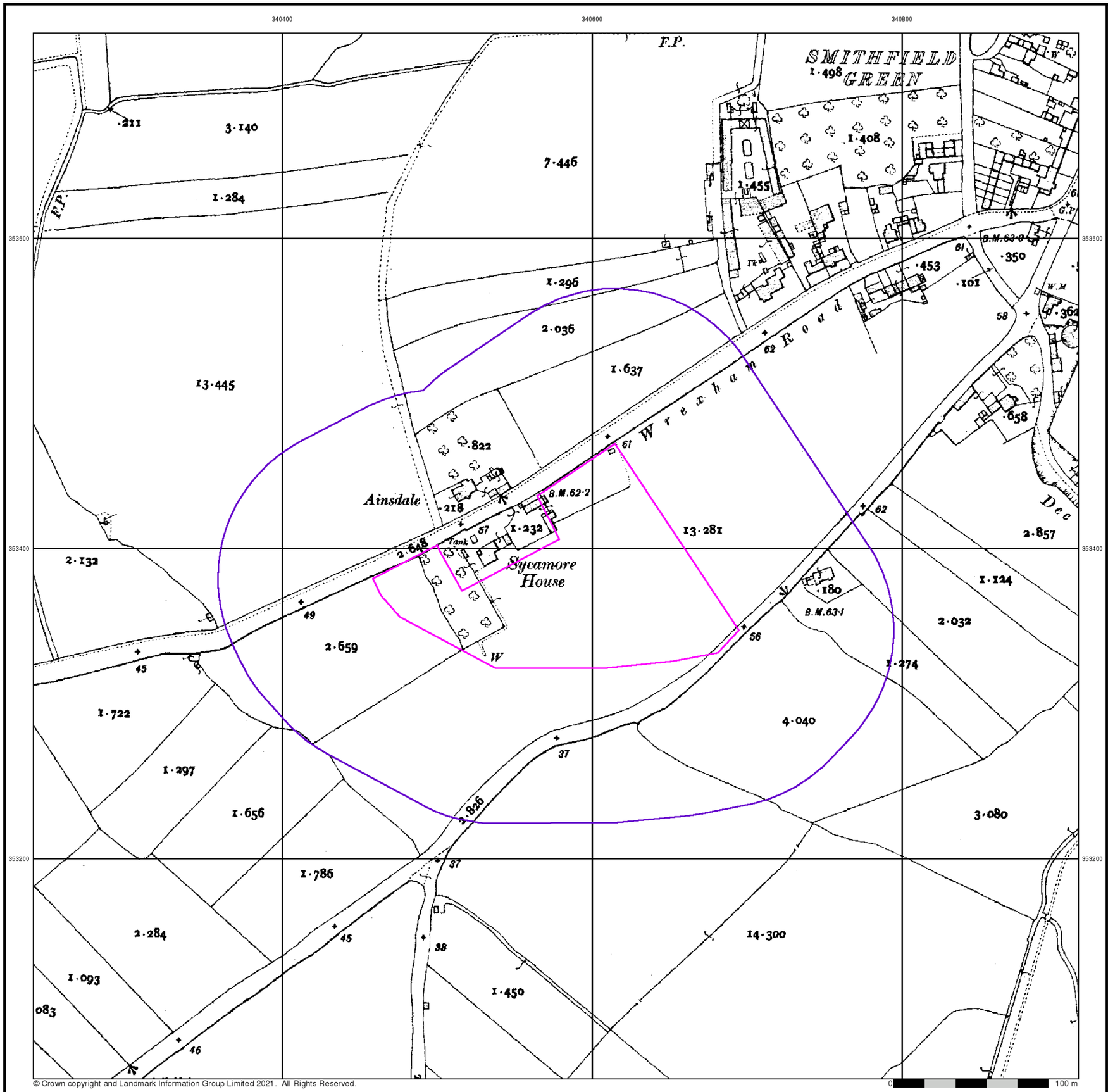
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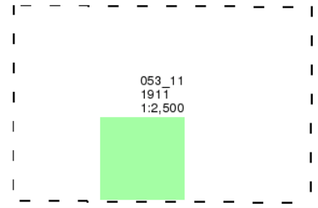
Cheshire

Published 1911

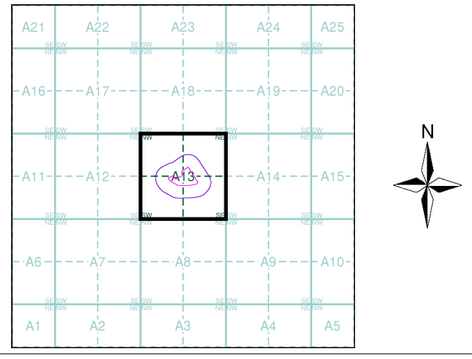
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Map Name(s) and Date(s)



Historical Map - Segment A13



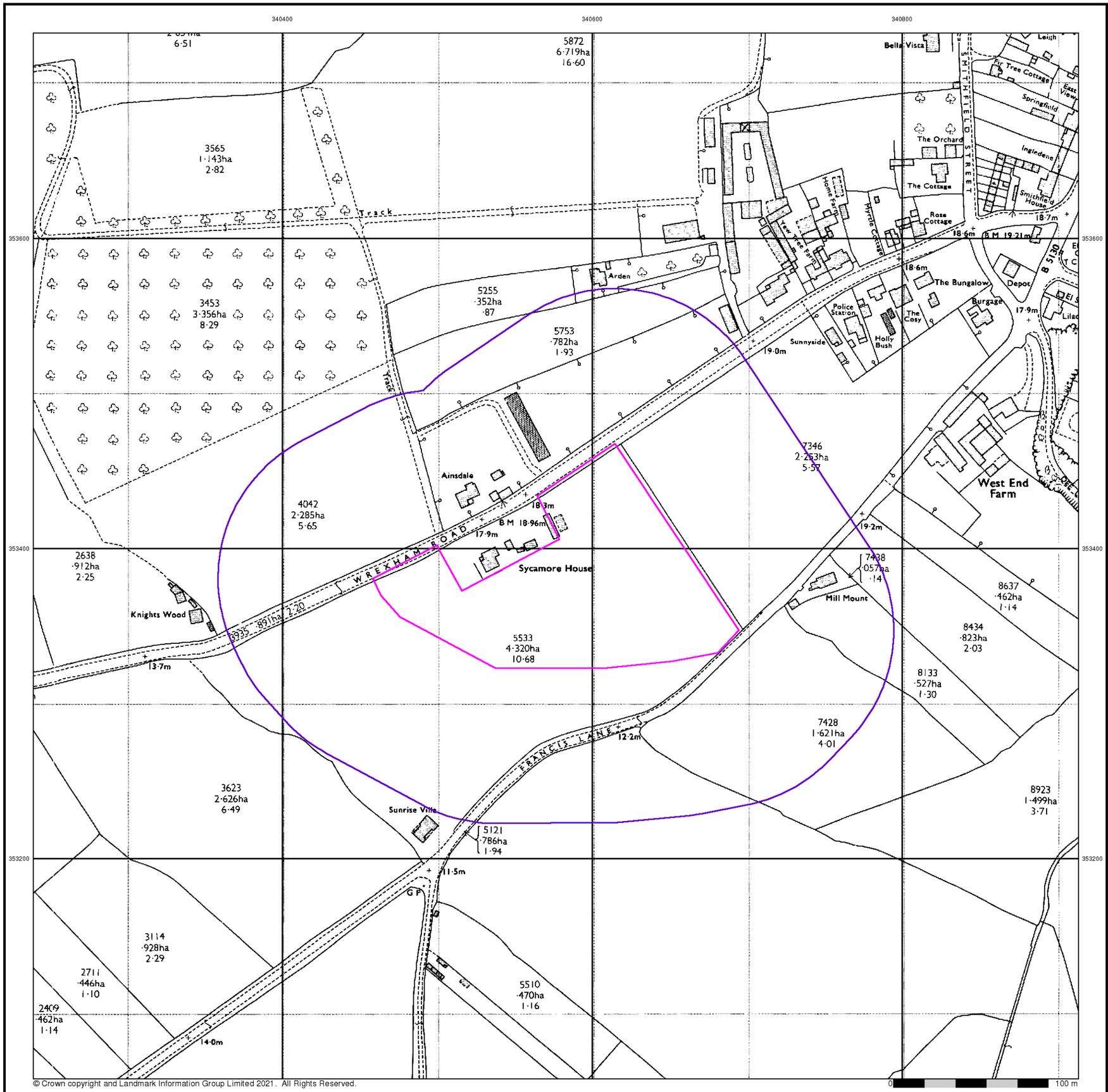
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Ordnance Survey Plan

Published 1971

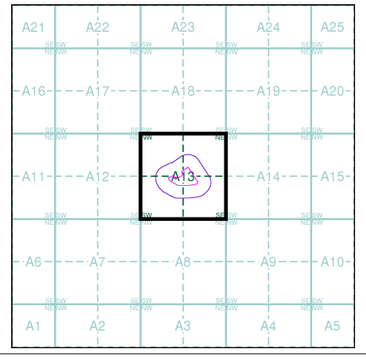
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

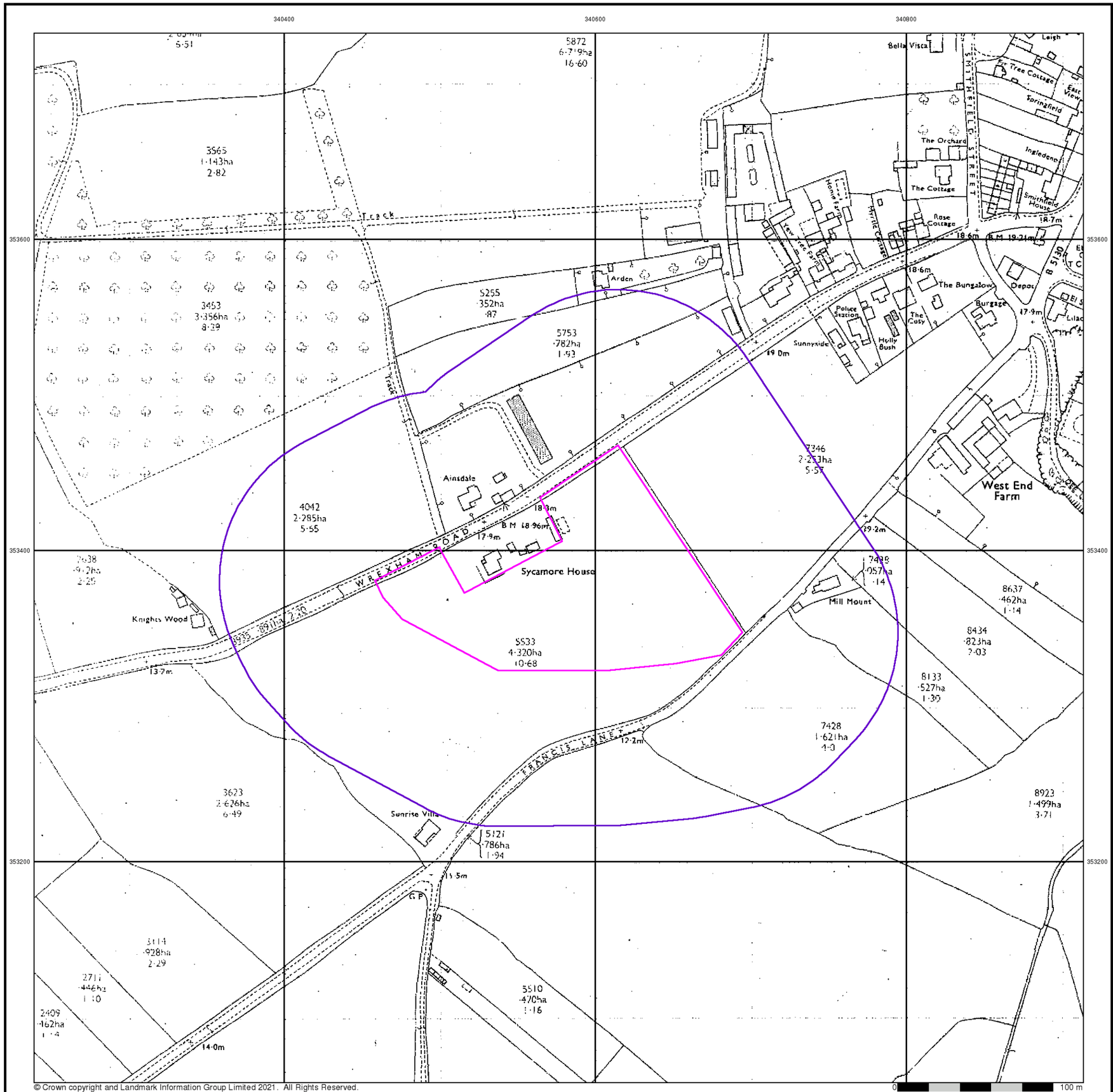
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Supply of Unpublished Survey Information

Published 1974

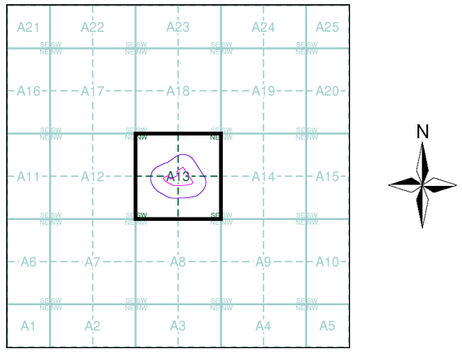
Source map scale - 1:2,500

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a `work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

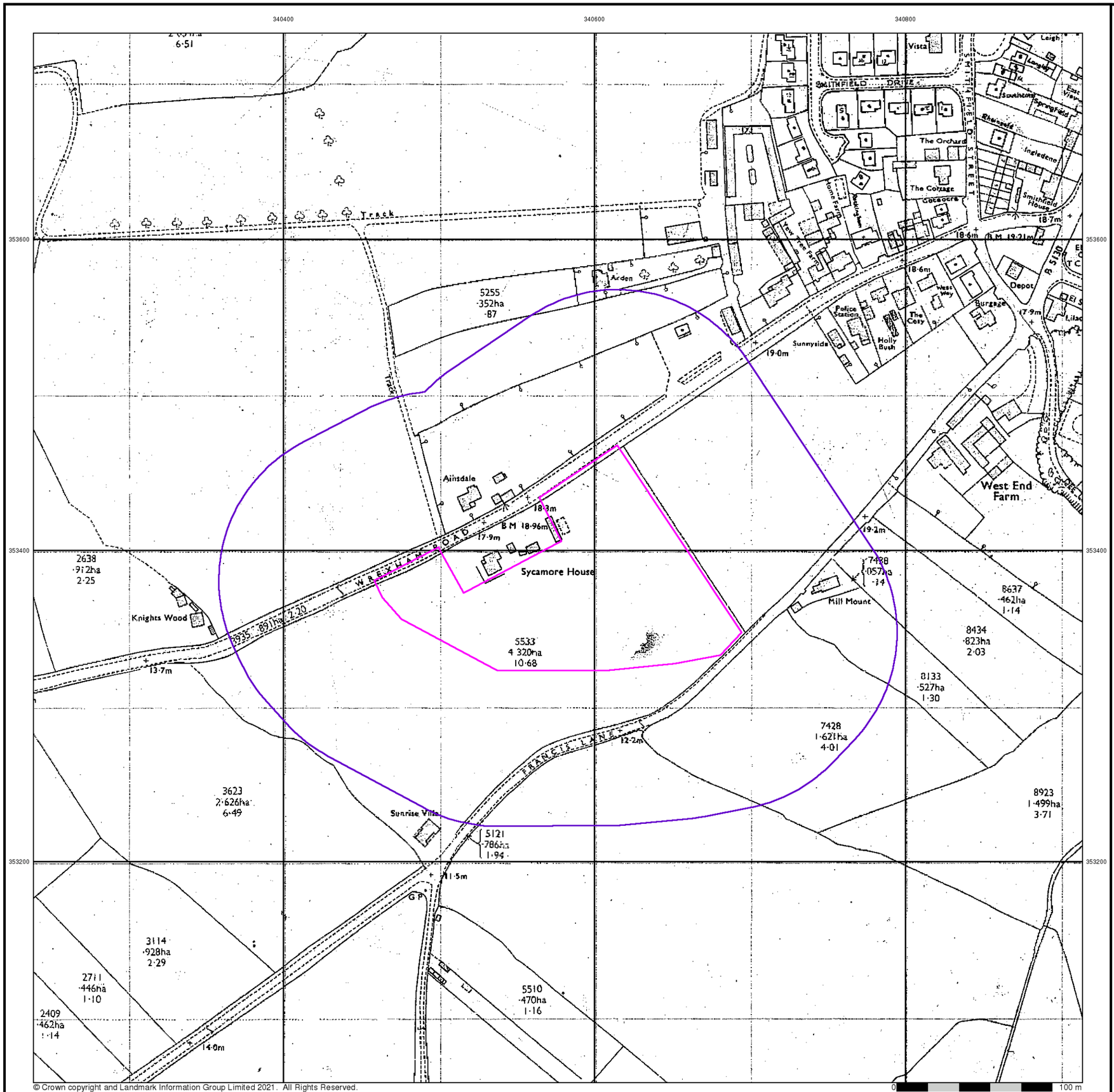
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National Grid Reference:	340580, 353380
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Additional SIMs

Published 1982

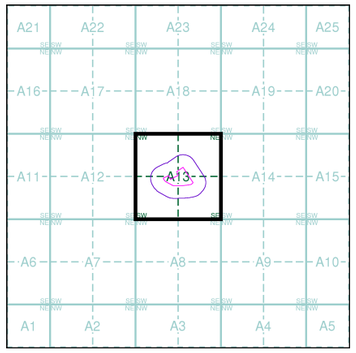
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

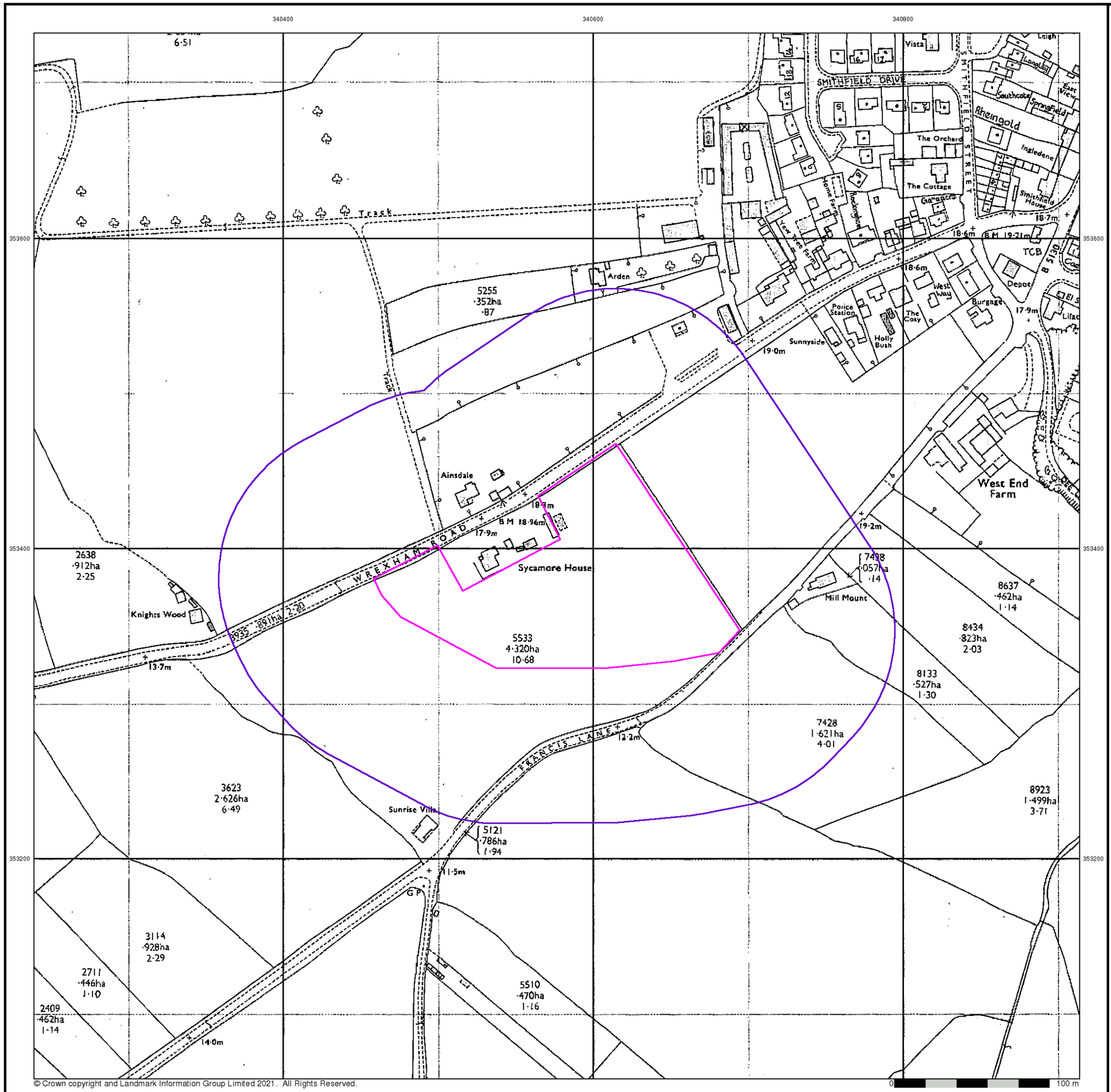
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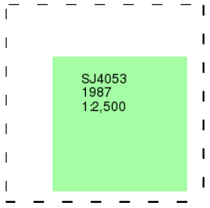
Additional SIMs

Published 1987

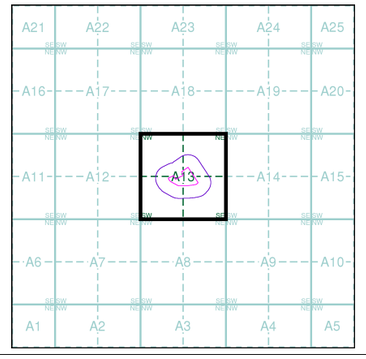
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Map Name(s) and Date(s)



Historical Map - Segment A13



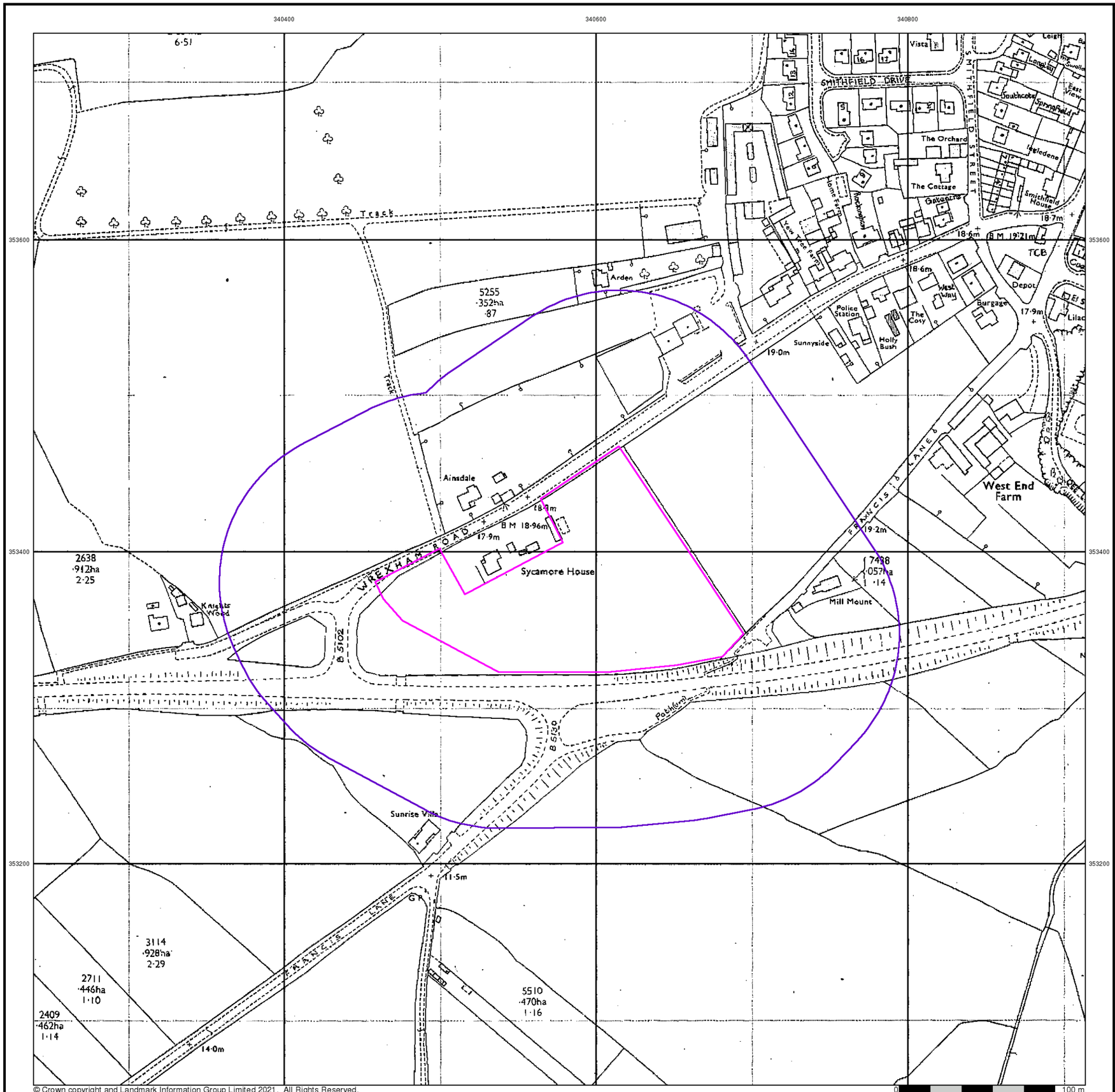
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Published 1987

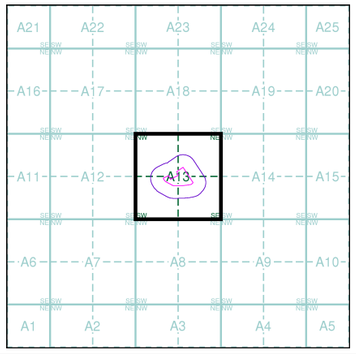
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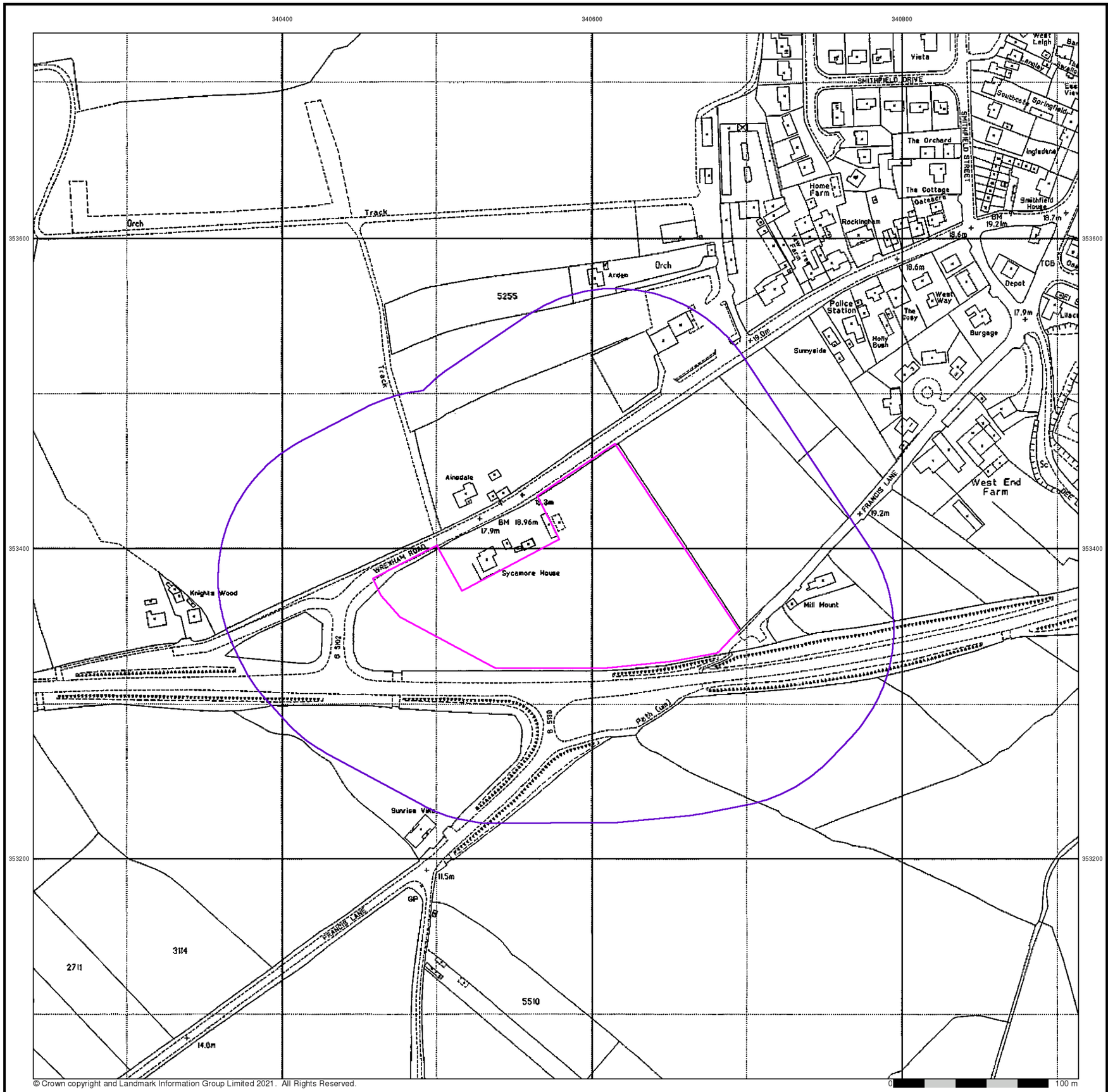
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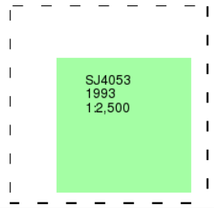
Large-Scale National Grid Data

Published 1993

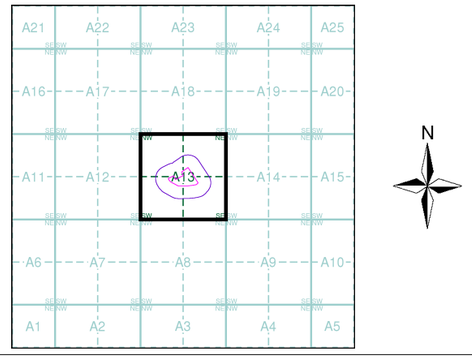
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



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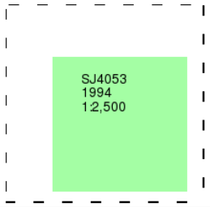
Large-Scale National Grid Data

Published 1994

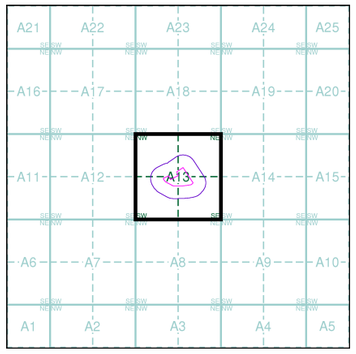
Source map scale - 1:2,500

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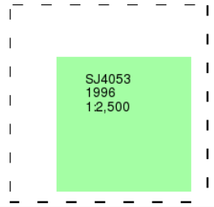
Large-Scale National Grid Data

Published 1996

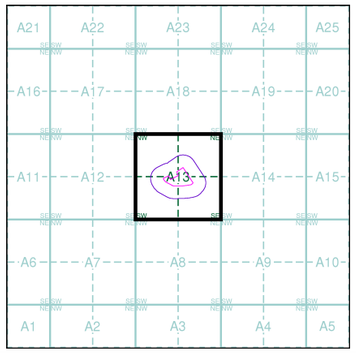
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Search Buffer (m):	100

Site Details

Wrexham Road, Holt, WREXHAM, LL13 9YU

Landmark INFORMATION GROUP
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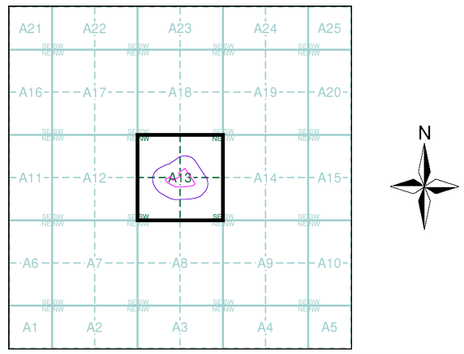
e3p

Historical Aerial Photography

Published 2001

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

Order Number:	272013330_1_1
Customer Ref:	14-608 IM A
National Grid Reference:	340580, 353380
Slice:	A
Site Area (Ha):	1.76
Search Buffer (m):	100

Site Details

Wrexham Road, Holt, WREXHAM, LL13 9YU

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Envirocheck® Report:

Datasheet

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Site Details:

Wrexham Road
Holt
WREXHAM
LL13 9YU

Client Details:

Mr A Edgar
e3p
City Airport Business Park
Eccles
Manchester
M30 7RU

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Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1				22
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 6		Yes		
Pollution Incidents to Controlled Waters	pg 7			2	2
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 7			1	
River Quality Biology Sampling Points	pg 8			1	
Substantiated Pollution Incident Register					
River Quality Chemistry Sampling Points					
Water Abstractions	pg 8		2		(*9)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 11	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Source Protection Zones	pg 11			2	
Extreme Flooding from Rivers or Sea without Defences	pg 11		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 11		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 12		1	9	45

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
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Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 19	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)					
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Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
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Explosive Sites					
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Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

e3p

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 20	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 20	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 21			1	2
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 22	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 22		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 22	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 22	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 22	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
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Fuel Station Entries	pg 23			1	1
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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	0	1	340581 353381
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	0	1	340581 353400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	0	1	340581 353350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (E)	7	1	340700 353381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	73	1	340581 353250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (E)	156	1	340850 353381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (W)	162	1	340300 353350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	165	1	340850 353400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	230	1	340900 353450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	342	1	341000 353500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	360	1	341050 353400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	367	1	341000 353550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	459	1	340000 353381
1	**Discharge Consents** Operator: Mr C Bellis Property Type: Domestic Property (Single) Location: Dwelling At Esp Hill Farm Holt Wre, Holt Wrexham Authority: Natural Resources Wales Catchment Area: Not Given Reference: CG0350201 Permit Version: 1 Effective Date: 9th May 1994 Issued Date: 9th May 1994 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: To Land **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 100m	A18SW (N)	569	2	340390 353990
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Farndon Sewage Treatment Works Ince Drive, Farndon, ., Chester, Ch3 6s Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: Cm0021401 Permit Version: 6 Effective Date: 4th July 2017 Issued Date: 4th July 2017 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	800	3	341309 353868

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Farndon Sewage Treatment Works Ince Drive, Farndon, ., Chester, Ch3 6s Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: Cm0021401 Permit Version: 5 Effective Date: 31st March 2013 Issued Date: 25th August 2010 Revocation Date: 3rd July 2017 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewage Disposal Works - Water Company Location: Farndon Stw Authority: Environment Agency, Welsh Region Catchment Area: River Dee Reference: Cm0021401 Permit Version: 5 Effective Date: 31st March 2015 Issued Date: 25th August 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Farndon Sewage Treatment Works Ince Drive, Farndon, ., Chester, Ch3 6s Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: Cm0021401 Permit Version: 4 Effective Date: 1st January 2010 Issued Date: 26th June 2009 Revocation Date: 30th March 2013 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewage Disposal Works - Water Company Location: Farndon Stw Authority: Environment Agency, Welsh Region Catchment Area: River Dee Reference: Cm0021401 Permit Version: 4 Effective Date: 1st January 2010 Issued Date: 26th June 2009 Revocation Date: 30th March 2015 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Farndon Sewage Treatment Works Ince Drive, Farndon, ., Chester, Ch3 6s Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: Cm0021401 Permit Version: 3 Effective Date: 31st December 2005 Issued Date: 31st December 2005 Revocation Date: 31st December 2009 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewage Disposal Works - Water Company Location: Farndon Stw Authority: Environment Agency, Welsh Region Catchment Area: River Dee Reference: Cm0021401 Permit Version: 3 Effective Date: 31st December 2005 Issued Date: 31st December 2005 Revocation Date: 31st December 2009 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Farndon Sewage Treatment Works Ince Drive, Farndon, ., Chester, Ch3 6s Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: Cm0021401 Permit Version: 2 Effective Date: 30th January 1985 Issued Date: 30th January 1985 Revocation Date: 30th December 2005 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewage Disposal Works - Water Company Location: Farndon Stw Authority: Environment Agency, Welsh Region Catchment Area: River Dee Reference: CM0021401 Permit Version: 2 Effective Date: 30th January 1985 Issued Date: 30th January 1985 Revocation Date: 30th December 2005 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dee **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	819	3	341330 353870

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewage Disposal Works - Water Company Location: Farndon Stw Authority: Environment Agency, Welsh Region Catchment Area: River Dee Reference: Cm0021401 Permit Version: 1 Effective Date: 29th August 1981 Issued Date: 29th August 1981 Revocation Date: 29th January 1985 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Dee **Status:** **Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
2	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Farndon Sewage Treatment Works Ince Drive, Farndon, ., Chester, Ch3 6s Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: Cm0021401 Permit Version: 1 Effective Date: 29th August 1981 Issued Date: 29th August 1981 Revocation Date: 29th January 1985 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Dee **Status:** **Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	819	3	341330 353870
3	**Discharge Consents** Operator: R Jones Property Type: Domestic Property (Multiple) Location: No'S 1-4 Border Cottages, Border Farm, Wrexham Road, Holt, Wrexham, LI13 9st Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: Cg0449901 Permit Version: 2 Effective Date: 26th November 2012 Issued Date: 26th November 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Plas Devon Brook **Status:** **Effective** Positional Accuracy: Located by supplier to within 10m	A12SW (W)	882	2	339590 353227
3	**Discharge Consents** Operator: R Jones Property Type: Domestic Property (Multiple) Location: No'S 1-4 Border Cottages, Border Farm, Wrexham Road, Holt, Wrexham, LI13 9st Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: Cg0449901 Permit Version: 2 Effective Date: 26th November 2012 Issued Date: 26th November 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Plas Devon Brook **Status:** **Effective** Positional Accuracy: Located by supplier to within 10m	A12SW (W)	882	2	339590 353227

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Holt Ps, Ll13 9je Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: Cm0193901 Permit Version: 2 Effective Date: 8th September 2010 Issued Date: 8th September 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Dee **Status: Effective** Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	918	2	341000 354300
4	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Holt Ps, Ll13 9je Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: Cm0193901 Permit Version: 2 Effective Date: 8th September 2010 Issued Date: 8th September 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Dee **Status: Effective** Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	918	2	341000 354300
4	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Station - Water Company Location: Holt Ps, Ll13 9je Authority: Natural Resources Wales Catchment Area: River Dee Reference: CM0193901 Permit Version: 1 Effective Date: 19th October 1989 Issued Date: 19th October 1989 Revocation Date: 7th September 2010 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Dee **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	918	2	341000 354300
5	**Discharge Consents** Operator: R Jones Property Type: Domestic Property (Multiple) Location: No'S 1-4 Border Cottages, Border Farm, Wrexham Road, Holt, Wrexham, Ll13 9st Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: Cg0449901 Permit Version: 2 Effective Date: 26th November 2012 Issued Date: 26th November 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Plas Devon Brook **Status: Effective** Positional Accuracy: Located by supplier to within 10m	A11SE (W)	938	2	339528 353262

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: R Jones Property Type: Domestic Property (Multiple) Location: No'S 1-4 Border Cottages, Border Farm, Wrexham Road, Holt, Wrexham, Ll13 9st Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: Cg0449901 Permit Version: 2 Effective Date: 26th November 2012 Issued Date: 26th November 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Plas Devon Brook **Status: Effective** Positional Accuracy: Located by supplier to within 10m	A11SE (W)	938	2	339528 353262
5	**Discharge Consents** Operator: Mr R Jones Property Type: Domestic Property (Multiple) Location: No'S 1-4 Border Cottages, Border Farm, Wrexham Road, Holt, Wrexham, Ll13 9st Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Cg0449901 Permit Version: 1 Effective Date: 5th March 2007 Issued Date: 5th March 2007 Revocation Date: 25th November 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Plas Devon Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A11SE (W)	938	2	339528 353262
6	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Holt - Vicarage Court P/S Off Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: CM0161501 Permit Version: 1 Effective Date: 17th August 1988 Issued Date: 17th August 1988 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Dee **Status: Effective** Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	942	2	341370 354030
6	**Discharge Consents** Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Holt - Vicarage Court P/S Off Authority: Natural Resources Wales Catchment Area: DEE - CHESTER WEIR TO CEIRIOG Reference: Cm0161501 Permit Version: 1 Effective Date: 17th August 1988 Issued Date: 17th August 1988 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Dee **Status: Effective** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	942	2	341370 354030
	Nearest Surface Water Feature	A14SW (E)	223	-	340917 353349

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Dee Confluence Authority: Environment Agency, Welsh Region Pollutant: Foam/Soap Suds Note: Not Supplied Incident Date: 8th April 1991 Incident Reference: 3605 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14NW (E)	320	3	341010 353400
8	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Poulton Intake Authority: Environment Agency, Welsh Region Pollutant: Farm Land Run-Off Note: Weather Incident Date: 13th April 1996 Incident Reference: 30895 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	439	3	340750 352900
9	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Border Farm, HOLT Authority: Environment Agency, Welsh Region Pollutant: Farm Effluent/Slurry Note: Neglect Incident Date: 7th May 1997 Incident Reference: 32152 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12SW (W)	770	3	339700 353250
10	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Farndon - Under By-Pass Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Accidental Spillage/Leakage Incident Date: 29th March 1996 Incident Reference: 27800 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14NE (E)	845	3	341500 353600
	River Quality Name: Dee GQA Grade: Not Supplied Reach: Conf.Alyn-Conf.Clewedog Estimated Distance (km): 19.5 Flow Rate: Flow less than 40 cumecs Flow Type: River Year: 2000	A14SW (E)	316	3	341010 353350

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	**River Quality Biology Sampling Points** Name: Dee Reach: Sj 399 561 Confluence River Alyn To Sj4107 5333 Bend Upstream A534 Roadbridge Estimated Distance: 3.70 Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Biology GQA Grade B - Good Year: 1995 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2000 GQA Grade: River Quality Biology GQA Grade A - Very Good Year: 2002 GQA Grade: River Quality Biology GQA Grade Not Supplied Year: 2003 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2004 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2005 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2006 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2007 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2008 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2009 GQA Grade: River Quality Biology GQA Grade D - Fair	A14SW (E)	376	3	341070 353330
12	**Water Abstractions** Operator: Bellis Bros Ltd Licence Number: 24/67/7/0186 Permit Version: 100 Location: Borehole Authority: Natural Resources Wales Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A13NE (N)	245	2	340690 353700
12	**Water Abstractions** Operator: Bellis Bros Ltd Licence Number: 24/67/7/0186 Permit Version: Not Supplied Location: Abstraction From A Borehole Near Smithfield Drive, Holt, Wrexham Authority: Natural Resources Wales Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13NE (N)	245	2	340690 353700
	Water Abstractions Operator: Clutton Bros Licence Number: 24/67/9/0064 Permit Version: 100 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th October 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A16SW (W)	1460	3	339080 353860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Trustees Of W Davies Licence Number: 24/67/9/0026 Permit Version: 100 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th September 1983 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A15SE (E)	1525	3	342210 353180
	Water Abstractions Operator: Trustees Of Ms J Barnston Licence Number: 24/67/7/0174 Permit Version: 100 Location: Well Authority: Natural Resources Wales Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10NE (E)	1594	2	342260 353050
	Water Abstractions Operator: Trustees Of Ms J Barnston Licence Number: 24/67/7/0174 Permit Version: 100 Location: Well Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10NE (E)	1594	3	342260 353050
	Water Abstractions Operator: Trustees Of Ms J Barnston Licence Number: 24/67/7/0074 Permit Version: 100 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th July 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10SE (SE)	1606	3	342110 352590

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Mr M Cornes Licence Number: 24/67/9/0053 Permit Version: 101 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(E)	1729	3	342420 353450
	Water Abstractions Operator: Mr H Cornes Licence Number: 24/67/9/0053 Permit Version: 100 Location: Borehole Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th July 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1729	3	342420 353450
	Water Abstractions Operator: Mr T Lewis Licence Number: 24/67/9/0052 Permit Version: 100 Location: Well Authority: Environment Agency, Welsh Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th July 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1804	3	342470 353030
	Water Abstractions Operator: V.F Parker & Co Licence Number: 24/67/9/0119 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, Welsh Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 4 Yearly Rate (m3): 1664 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A21SW (NW)	1922	3	339080 354720

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	A13SE (SE)	0	2	340581 353381
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A13SE (SE)	0	2	340581 353381
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A13SE (SE)	0	2	340581 353381
13	**Source Protection Zones** Name: Not Supplied Source: Natural Resources Wales Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A12SE (W)	345	2	340119 353316
14	**Source Protection Zones** Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A12SE (W)	345	3	340119 353316
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied	A13SE (S)	21	2	340580 353302
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13SE (S)	63	2	340581 353260
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (E)	219	2	340885 353455
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A14SW (E)	247	2	340940 353365
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied	A14SW (E)	250	2	340944 353365
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (S)	73	2	340585 353250
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 76.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14SW (E)	223	5	340917 353349
16	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 561.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A13SE (SE)	252	5	340896 353196
17	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14SW (E)	316	5	341010 353359
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 22.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14SW (E)	320	5	341014 353363
19	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 792.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Dyfrdwy Catchment Name: Dee Primacy: 1	A14NW (E)	335	5	341021 353422
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 988.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Dyfrdwy Catchment Name: Dee Primacy: 1	A14SW (E)	338	5	341031 353378
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 390.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NW (E)	376	5	341057 353443
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 392.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NW (E)	376	5	341066 353404
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 300.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A8NE (S)	496	5	340794 352850

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 74.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A8NE (S)	496	5	340794 352850
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 166.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A8NE (SE)	530	5	340867 352837
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 98.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A8NE (SE)	530	5	340867 352837
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 217.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 2	A9NW (SE)	584	5	340965 352823
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9NW (SE)	584	5	340965 352823
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9NW (SE)	591	5	340966 352816
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 144.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9NW (SE)	593	5	340966 352813
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 294.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 2	A8SE (S)	680	5	340844 352673
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 67.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A8SE (S)	680	5	340844 352673

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 76.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A7NE (SW)	709	5	340000 352830
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 120.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A8SE (SE)	730	5	340901 352637
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 107.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 2	A8SE (SE)	730	5	340901 352637
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 506.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 2	A9SW (SE)	732	5	340996 352672
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 214.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9SW (SE)	732	5	340996 352672
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 95.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9NW (SE)	747	5	341176 352774
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 569.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9NW (SE)	747	5	341176 352774
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	756	5	341408 353595
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.7 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	760	5	341398 353632

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 32.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	767	5	341422 353590
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	768	5	341422 353590
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 37.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	769	5	341412 353626
45	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	769	5	341420 353598
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	769	5	341420 353601
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	771	5	341421 353604
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 130.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	774	5	341424 353605
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	774	5	341410 353640
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 343.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	775	5	341410 353643

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	775	5	341410 353643
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 464.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Devon Brook Catchment Name: Dee Primacy: 1	A12NW (W)	776	5	339717 353609
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 134.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	778	5	341414 353643
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 83.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	780	5	341442 353568
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 35.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A7NE (SW)	784	5	339940 352784
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.9 Watercourse Level: Underground Permanent: True Watercourse Name: Devon Brook Catchment Name: Dee Primacy: 1	A12NW (W)	790	5	339680 353510
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4708.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Dyfrdwy Catchment Name: Dee Primacy: 1	A9NE (SE)	791	5	341264 352798
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 491.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Devon Brook Catchment Name: Dee Primacy: 1	A12NW (W)	791	5	339678 353507
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 266.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A7NE (SW)	819	5	339916 352759

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9SW (S)	833	5	340918 352535
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 108.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A9SW (S)	835	5	340917 352532
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 216.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A14NE (E)	842	5	341516 353530
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 11.4 Watercourse Level: Underground Permanent: True Watercourse Name: Devon Brook Catchment Name: Dee Primacy: 1	A17SW (NW)	882	5	339779 353943
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 306.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Devon Brook Catchment Name: Dee Primacy: 1	A17SW (NW)	892	5	339776 353954
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 231.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A8SE (S)	925	5	340880 352430
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2423.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Dyfrdwy Catchment Name: Dee Primacy: 1	A19SE (NE)	951	5	341389 354019
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A19SE (NE)	951	5	341389 354019
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 39.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A19SE (NE)	960	5	341408 354006

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 133.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Dee Primacy: 1	A15SW (E)	987	5	341679 353293

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Appleby Drain, Cheshire Name: Holt-Farndon Bypass Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD17203 First Input Date: 31st December 1976 Last Input Date: 31st March 1987 Specified Waste Type: Deposited Waste included Inert Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: Not Supplied	A14NE (E)	758	3	341418 353571
	Local Authority Landfill Coverage Name: Wrexham County Borough Council - Has supplied landfill data		0	6	340581 353381
	Local Authority Landfill Coverage Name: Chester City Council - Had landfill data but passed it to the relevant environment agency		337	7	341021 353435
	Local Authority Landfill Coverage Name: Cheshire County Council - Has supplied landfill data		337	8	341021 353435
71	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13NE (NE)	357	-	340855 353731
72	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A18SW (NW)	579	-	340280 353940
73	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1913	A19NW (NE)	709	-	340918 354108
74	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A19NW (NE)	838	-	341109 354143

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A13SE (SE)	0	1	340581 353381
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	0	1	340581 353381
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A13SE (S)	29	1	340581 353294
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SW (SW)	114	1	340420 353254
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A13SE (E)	206	1	340900 353333
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12SE (W)	387	1	340075 353321
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NE (E)	820	1	341500 353500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A19SE (NE)	851	1	341441 353754
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A14NE (E)	856	1	341516 353586
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A19SE (NE)	930	1	341500 353810
75	**BGS Recorded Mineral Sites** Site Name: Holt Brick Field Location: Holt, Wrexham, Denbighshire Source: British Geological Survey, National Geoscience Information Service Reference: 56738 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary, Devensian Geology: Till, Devensian Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A18SW (N)	437	1	340485 353885
76	**BGS Recorded Mineral Sites** Site Name: Holt Castle Location: Holt, Wrexham, Denbighshire Source: British Geological Survey, National Geoscience Information Service Reference: 56736 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Triassic Geology: Chester Pebble Beds Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	581	1	341090 353800
77	**BGS Recorded Mineral Sites** Site Name: Holt Tile & Pottery Works Location: Holt, Wrexham, Denbighshire Source: British Geological Survey, National Geoscience Information Service Reference: 56737 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary, Devensian Geology: Till, Devensian Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A23SW (N)	997	1	340520 354460
	BGS Measured Urban Soil Chemistry No data available				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	142	1	340674 353185
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	142	1	340674 353185
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	142	1	340674 353185
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	29	1	340581 353294
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	340581 353381

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	**Contemporary Trade Directory Entries** Name: Cars To Buy Location: 3, Millfield, Holt, Wrexham, Clwyd, LL13 9WJ Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (E)	144	-	340827 353402
78	**Contemporary Trade Directory Entries** Name: Cars Wanted Location: 3, Millfield, Holt, Wrexham, Clwyd, LL13 9WJ Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (E)	144	-	340827 353402
79	**Contemporary Trade Directory Entries** Name: R P Gaade Location: Wrexham Rd, Holt, Wrexham, Clwyd, LL13 9YU Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	193	-	340747 353608
80	**Contemporary Trade Directory Entries** Name: Highly Polished Location: The Magpies, Smithfield Green, Holt, Wrexham, Clwyd, LL13 9AJ Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	359	-	340873 353717
81	**Contemporary Trade Directory Entries** Name: M & N Davies Location: Castle Street, Holt, Wrexham, LL13 9YW Classification: Car Dealers - Used **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	407	-	340933 353721
81	**Contemporary Trade Directory Entries** Name: Castle Garage Ltd Location: Castle Street, Holt, Wrexham, Clwyd, LL13 9YW Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	409	-	340934 353722
81	**Contemporary Trade Directory Entries** Name: Academy Garage Location: Castle Street, Holt, Wrexham, Clwyd, LL13 9YL Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	435	-	340978 353706
82	**Contemporary Trade Directory Entries** Name: The Magpie Fairy Location: The Cross,Castle St, Holt, Wrexham, Clwyd, LL13 9YW Classification: Jewellery Manufacturers & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	607	-	341032 353907
83	**Fuel Station Entries** Name: Academy Garage Ltd Location: Castle Street , Holt , Wrexham, Wrexham, LL13 9YL Brand: Obsolete Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	435	-	340978 353706
84	**Fuel Station Entries** Name: Castle Garage Location: Castle Street , Holt , Wrexham, Wrexham, LL13 9YW Brand: Obsolete Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Approximate location provided by supplier	A19SW (NE)	684	-	341004 354030
85	**Points of Interest - Commercial Services** Name: R Gaade Location: Wrexham Road Farm, Wrexham Road, Holt, Wrexham, LL13 9YU Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13NE (NE)	144	9	340718 353568

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
85	**Points of Interest - Commercial Services** Name: R P Gaade Location: Wrexham Rd, Holt, Wrexham, Clwyd, LL13 9YU Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13NE (NE)	193	9	340747 353608
86	**Points of Interest - Manufacturing and Production** Name: Bellis Bros Ltd Location: Esp Hill House, Frog Lane, Holt, Wrexham, LL13 9SU Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A17SE (NW)	624	9	340208 353953
86	**Points of Interest - Manufacturing and Production** Name: Bellis Bros Location: Esp Hill Farm, Frog Lane, Holt, Wrexham, LL13 9SL Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A17SE (NW)	665	9	340203 353997
87	**Points of Interest - Manufacturing and Production** Name: Tank Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	818	9	339658 353215
87	**Points of Interest - Manufacturing and Production** Name: Tank Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12SW (W)	884	9	339587 353236
87	**Points of Interest - Manufacturing and Production** Name: Tanks Location: LL13 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	884	9	339587 353236
88	**Points of Interest - Manufacturing and Production** Name: Tanks Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	945	9	341467 353891
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	957	9	341486 353885
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	958	9	341508 353853
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	965	9	341489 353894
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	969	9	341516 353861
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	974	9	341525 353856

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	979	9	341521 353872
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	984	9	341512 353895
88	**Points of Interest - Manufacturing and Production** Name: Tank Location: CH3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SE (NE)	995	9	341540 353871
89	**Points of Interest - Public Infrastructure** Name: Cemetery Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	653	9	340887 354061
89	**Points of Interest - Public Infrastructure** Name: Cemetery Location: LL13 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	662	9	340900 354064
90	**Points of Interest - Public Infrastructure** Name: Sluice Location: LL13 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	759	9	341190 352770
90	**Points of Interest - Public Infrastructure** Name: Sluice Location: LL13 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	765	9	341197 352769
91	**Points of Interest - Public Infrastructure** Name: Filter Beds Location: CH3 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	951	9	341492 353865
91	**Points of Interest - Public Infrastructure** Name: Filter Beds Location: CH3 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	952	9	341493 353865
91	**Points of Interest - Public Infrastructure** Name: Sewage Works Location: CH3 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	992	9	341507 353916
92	**Points of Interest - Public Infrastructure** Name: Sewage Pumping Station Location: LL13 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	994	9	341059 354356
92	**Points of Interest - Public Infrastructure** Name: Sewage Pumping Station Location: LL13 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	995	9	341059 354358

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
93	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	463	9	340996 353729
93	**Points of Interest - Recreational and Environmental** Name: Play Area Location: LL13 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	474	9	341005 353735
93	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Castle Street, LL13 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A14NW (NE)	477	9	341011 353732
93	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	495	9	341031 353734
94	**Points of Interest - Recreational and Environmental** Name: Play Area Location: LL13 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	789	9	341067 354113

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
95	**Sites of Special Scientific Interest** Name: Afon Dyfrdwy (River Dee) Multiple Areas: Y Total Area (m2): 14914217.92 Source: Natural Resources Wales Reference: 255431wdw Designation Details: Mixed Biological And Geological Designation Date: 30th November 1995 Date Type: Notified	A14NW (E)	317	2	341003 353421
96	**Sites of Special Scientific Interest** Name: River Dee (England) Multiple Areas: Y Total Area (m2): 3619957.37 Source: Natural England Reference: 2000452 Designation Details: Geological Conservation Review Designation Date: 2nd May 2002 Date Type: Notified Designation Details: Special Area Of Conservation Designation Date: 2nd May 2002 Date Type: Notified Designation Details: Site Of Special Scientific Interest Designation Date: 2nd May 2002 Date Type: Notified Designation Details: Water Framework Directive (WFD) Designation Date: 2nd May 2002 Date Type: Notified	A14NW (E)	334	10	341021 353417
97	**Special Areas of Conservation** Name: River Dee And Bala Lake / Afon Dyfrdwy A Llyn Tegid (Wales) Multiple Areas: Y Total Area (m2): 11498849.64 Source: Natural Resources Wales Reference: UK0030252 **Status: Designated**	A14NW (E)	317	2	341003 353421
98	**Special Areas of Conservation** Name: River Dee And Bala Lake / Afon Dyfrdwy A Llyn Tegid (England) Multiple Areas: Y Total Area (m2): 1560766.85 Source: Natural Resources Wales Reference: UK0030252 **Status: Designated**	A14NW (E)	334	2	341021 353417
99	**Special Areas of Conservation** Name: River Dee And Bala Lake Multiple Areas: Y Total Area (m2): 1460732.52 Source: Natural England Reference: UK0030252 **Status: Designated**	A14NW (E)	334	10	341021 353417

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Wrexham County Borough Council - Public Protection Department	April 2016	Annually
Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department	August 2008	Not Applicable
Natural Resources Wales	June 2020	Annually
Cheshire West and Chester Council - Environmental Health Department	November 2013	Annually
Discharge Consents		
Environment Agency - Welsh Region	August 2014	Quarterly
Natural Resources Wales	November 2020	Quarterly
Environment Agency - North West Region	October 2020	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North West Region	March 2013	Annual Rolling Update
Environment Agency - Welsh Region	March 2013	Annual Rolling Update
Integrated Pollution Controls		
Environment Agency - North West Region	October 2008	Variable
Environment Agency - Welsh Region	October 2008	Variable
Integrated Pollution Prevention And Control		
Natural Resources Wales	December 2020	Quarterly
Environment Agency - North West Region	October 2020	Quarterly
Environment Agency - Welsh Region	October 2020	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Wrexham County Borough Council - Environmental Health Department	April 2014	Variable
Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department	December 2008	Not Applicable
Cheshire West and Chester Council - Environmental Health Department	July 2015	Variable
Local Authority Pollution Prevention and Controls		
Wrexham County Borough Council - Environmental Health Department	April 2014	Annual Rolling Update
Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department	December 2008	Not Applicable
Cheshire West and Chester Council - Environmental Health Department	July 2015	Annually
Local Authority Pollution Prevention and Control Enforcements		
Wrexham County Borough Council - Environmental Health Department	April 2014	Variable
Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department	December 2008	Not Applicable
Cheshire West and Chester Council - Environmental Health Department	July 2015	Variable
Nearest Surface Water Feature		
Ordnance Survey	October 2020	
Pollution Incidents to Controlled Waters		
Environment Agency - Welsh Region	December 1998	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - North West Region	March 2013	Annual Rolling Update
Environment Agency - Welsh Region	March 2013	Annual Rolling Update
Natural Resources Wales	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters		
Environment Agency - North West Region	March 2013	Annual Rolling Update
Environment Agency - Welsh Region	March 2013	Annual Rolling Update
Natural Resources Wales	March 2013	Annual Rolling Update
Registered Radioactive Substances		
Natural Resources Wales	January 2015	Annually
Environment Agency - North West Region	June 2016	
Environment Agency - Welsh Region	June 2016	
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable

Agency & Hydrological	Version	Update Cycle
River Quality Biology Sampling Points		
Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register		
Natural Resources Wales	November 2020	Quarterly
Environment Agency - North West Region - South Area	October 2020	Quarterly
Environment Agency Wales - North Area	October 2020	Quarterly
Water Abstractions		
Natural Resources Wales	November 2020	Quarterly
Environment Agency - Welsh Region	October 2020	Quarterly
Water Industry Act Referrals		
Natural Resources Wales	November 2020	Quarterly
Environment Agency - North West Region	October 2017	Quarterly
Environment Agency - Welsh Region	October 2017	Quarterly
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Natural Resources Wales	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Natural Resources Wales	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Natural Resources Wales	January 2018	Annually
Source Protection Zones		
Natural Resources Wales	November 2016	Annual Rolling Update
Environment Agency - Head Office	October 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Natural Resources Wales	August 2018	Quarterly
Environment Agency - Head Office	September 2020	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	September 2020	Quarterly
Natural Resources Wales	September 2020	Quarterly
Areas Benefiting from Flood Defences		
Natural Resources Wales	November 2019	Quarterly
Flood Water Storage Areas		
Natural Resources Wales	August 2019	Quarterly
Flood Defences		
Natural Resources Wales	November 2019	Quarterly
OS Water Network Lines		
Ordnance Survey	September 2020	Quarterly
Surface Water 1 in 30 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Natural Resources Wales	October 2013	Annually
Surface Water 1 in 100 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Natural Resources Wales	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Natural Resources Wales	October 2013	Annually
Surface Water Suitability		
Environment Agency - Head Office	October 2013	Annually
Natural Resources Wales	October 2013	Annually

Agency & Hydrological	Version	Update Cycle
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	Annually
Waste	**Version**	**Update Cycle**
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Natural Resources Wales	July 2017	Quarterly
Environment Agency - Head Office	October 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North West Region	October 2008	Not Applicable
Environment Agency - Welsh Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North West Region - South Area	October 2020	Quarterly
Environment Agency Wales - North Area	October 2020	Quarterly
Natural Resources Wales	October 2020	Quarterly
Licensed Waste Management Facilities (Locations)		
Natural Resources Wales	November 2020	Quarterly
Environment Agency - North West Region - South Area	October 2020	Quarterly
Environment Agency Wales - North Area	October 2020	Quarterly
Local Authority Landfill Coverage		
Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department	May 2000	Not Applicable
Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department	May 2000	Not Applicable
Wrexham County Borough Council	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department	February 2005	Not Applicable
Wrexham County Borough Council	June 2003	Not Applicable
Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department	May 2000	Not Applicable
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites		
Environment Agency - North West Region - South Area	March 2003	Not Applicable
Environment Agency Wales - North Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North West Region - South Area	March 2003	Not Applicable
Environment Agency Wales - North Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - North West Region - South Area	March 2003	Not Applicable
Environment Agency Wales - North Area	March 2003	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Cheshire West and Chester Council - Planning Department	April 2016	Variable
Wrexham County Borough Council - Planning Department	February 2016	Variable
Cheshire County Council (now part of Cheshire East Council) - Planning Department	July 2008	Annual Rolling Update
Chester City Council (now part of Cheshire West and Chester Council)	October 2008	Not Applicable
Planning Hazardous Substance Consents		
Cheshire West and Chester Council - Planning Department	April 2016	Variable
Wrexham County Borough Council - Planning Department	February 2016	Variable
Cheshire County Council (now part of Cheshire East Council) - Planning Department	July 2008	Annual Rolling Update
Chester City Council (now part of Cheshire West and Chester Council)	October 2008	Not Applicable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry		
British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	November 2020	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability		
Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2020	Quarterly
Fuel Station Entries Catalist Ltd - Experian	September 2020	Quarterly
Gas Pipelines National Grid	January 2021	
Points of Interest - Commercial Services PointX	December 2020	Quarterly
Points of Interest - Education and Health PointX	December 2020	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2020	Quarterly
Points of Interest - Public Infrastructure PointX	December 2020	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2020	Quarterly
Underground Electrical Cables National Grid	August 2020	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	April 2020	Bi-Annually
Natural Resources Wales	August 2018	Bi-Annually
Areas of Adopted Green Belt		
Cheshire West and Chester Council - Planning Department	June 2020	As notified
Chester City Council (now part of Cheshire West and Chester Council)	June 2020	As notified
Wrexham County Borough Council	June 2020	As notified
Areas of Unadopted Green Belt		
Cheshire West and Chester Council - Planning Department	June 2020	As notified
Chester City Council (now part of Cheshire West and Chester Council)	June 2020	As notified
Wrexham County Borough Council	June 2020	As notified
Areas of Outstanding Natural Beauty		
Natural England	June 2019	Bi-Annually
Natural Resources Wales	June 2019	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	April 2020	Bi-Annually
Wrexham County Borough Council	August 2018	Bi-Annually
Marine Nature Reserves		
Natural Resources Wales	August 2018	Bi-Annually
National Nature Reserves		
Natural Resources Wales	June 2019	Bi-Annually
National Parks		
Natural England	April 2017	Bi-Annually
Natural Resources Wales	August 2018	Annually
Nitrate Vulnerable Zones		
Environment Agency - Head Office	December 2017	Bi-Annually
Natural Resources Wales	July 2019	Bi-Annually
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	October 2005	
Ramsar Sites		
Natural Resources Wales	July 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural Resources Wales	March 2020	Bi-Annually
Natural England	May 2020	Bi-Annually
Special Areas of Conservation		
Natural Resources Wales	August 2020	Bi-Annually
Natural England	July 2020	Bi-Annually
Special Protection Areas		
Natural Resources Wales	August 2018	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Natural Resources Wales** Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
4	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	**Wrexham County Borough Council** Lampet Street, Guildhall, Wrexham, Clwyd, LL11 1WL	Telephone: 01978 292000 Fax: 01978 292502 Website: www.wrexham.gov.uk
7	**Chester City Council (now part of Cheshire West and Chester Council) - Environmental Health Department** 58 Nicholas Street, Chester, Cheshire, CH1 2NP	Telephone: 0300 123 8123 Email: enquiries@cheshirewestandchester.gov.uk Website: www.cheshirewestandchester.gov.uk
8	**Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department** Westfields, Middlewich Road, Sandbach, Cheshire, CW11 1HZ	Telephone: 0300 123 5015 Website: www.cheshireeast.gov.uk
9	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.