

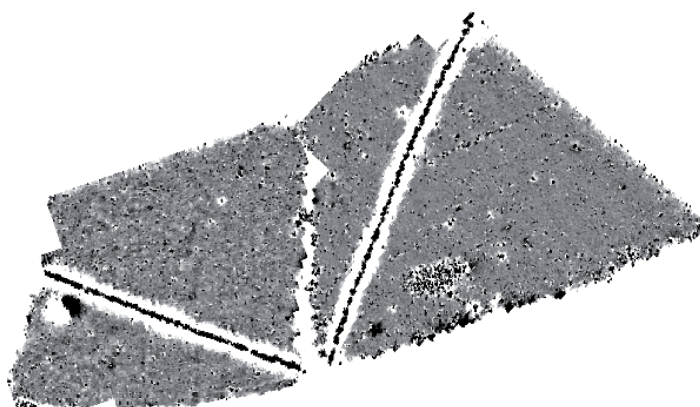


Northamptonshire
County Council

Northamptonshire Archaeology

An Archaeological Geophysical Survey and
Desk-Based Assessment of Land South of
Bushbury Cemetery,
Wolverhampton, West Midlands

November 2008



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Report 09/06

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QUALITY CONTROL

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OASIS REPORT FORM

PROJECT DETAILS		
Project name	An Archaeological Geophysical Survey and Desk-Based Assessment of Land South of Bushbury Cemetery and Crematorium, Wolverhampton, West Midlands	
Short description	Northamptonshire Archaeology conducted an archaeological geophysical survey and desk-based research on two fields to the south of Bushbury Cemetery and Crematorium, Wolverhampton, West Midlands. Few archaeological finds are known from the area although the field name 'Underhill Croft' points to a small pre 19th century farmstead. Approximately 5ha of detailed gradiometer survey was carried out in two fields. Survey did not reveal any significant archaeological remains. However it did identify an area of possible ceramic debris in the south of Field 1 which may indicate the site of the former farmstead. Three modern services and two anomalies of unknown source were also recorded.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Agricultural - Pasture	
Future work	Unknown	
Monument type/ period		
Significant finds	None	
PROJECT LOCATION		
County	West Midlands	
Site address	Bushbury, Wolverhampton	
Study area	5 ha	
OS Easting & Northing	SJ 9310, 0275 centre	
Height OD	176m – 143m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator	Wolverhampton City Council	
Project Design originator	Northamptonshire Archaeology	
Director/Supervisor	Ian Fisher	
Project Manager	Adrian Butler	
Sponsor or funding body	Wolverhampton City Council	
PROJECT DATE		
Start date	November 2008	
End date	November 2008	
ARCHIVES	Location	Content
Physical	n/a	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	
Title	An Archaeological Geophysical Survey on Land South of Bushbury Cemetery and Crematorium, Wolverhampton, West Midlands	
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**AN ARCHAEOLOGICAL GEOPHYSICAL SURVEY
AND DESK-BASED ASSESSMENT OF
LAND SOUTH OF BUSHBURY CEMETERY AND CREMATORIUM
WOLVERHAMPTON, WEST MIDLANDS**

NOVEMBER 2008

ABSTRACT

Northamptonshire Archaeology conducted an archaeological geophysical survey and desk-based research on two fields to the south of Bushbury Cemetery and Crematorium, Wolverhampton, West Midlands. Few archaeological finds are known from the area although the field name 'Underhill Croft' points to a small pre 19th-century farmstead. Approximately 5ha of detailed gradiometer survey was carried out in two fields. Survey did not reveal any significant archaeological remains. However, it did identify an area of possible ceramic debris in the south of Field 1 which may indicate the site of the former farmstead. Three modern services and two anomalies of unknown source were also recorded.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by Mike Shaw of Wolverhampton City Council to undertake geophysical survey and desk-based assessment on land south of Bushbury Cemetery and Crematorium, Wolverhampton, West Midlands (NGR 39100, 30275; Fig 1).

The objectives of the geophysical survey were to determine the nature and date of the large boundary bank which separates the two fields and to identify the presence or absence of archaeological remains within the proposed development area. The programme consisted of a detailed gradiometer survey of approximately 5ha area of land.

2 TOPOGRAPHY AND GEOLOGY

The site is situated south of Bushbury Cemetery and Crematorium, 700m north-east of Bushbury parish church towards the northern boundary of Wolverhampton. The site comprises two pasture fields (1 and 2) separated by a large bank which does not extend north or south of the two fields. Due to dense vegetation, fencing and steep slope it was not possible to survey the bank. The fields slope down gently from 176m AOD in the west to 143m AOD in the east. The site is bound by Underhill Lane in the east and fields to the south and west.

The underlying solid geology is mapped as Permian and Triassic Sandstones, undifferentiated,

including Bunter and Keuper with possible superficial overlying deposits of Glacial Till in some areas in the east (<http://www.bgs.ac.uk/GeoIndex/index.htm> accessed 20/22/08).

3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

3.1 Historical background

The parish was known as '*Biscopsberie*' at Domesday (1086), meaning Bishop's bury, although it is not clear whether the Bishop element suggests a personal name or an ecclesiastical connection. The bury part of the name refers to a defended or fortified place and can often imply the presence of an Iron Age hillfort.

Bushbury seems never to have been a substantial nucleated settlement. Rather, settlement appears to have been of a dispersed nature, with small hamlets clustered around the several manors (Bushbury, Moseley, Elston, Showell, Oxley, Wobaston, and Essington) and a number of other locations around the parish. The hamlets, with their surrounding open fields, would have been set in woodland clearings, or assarts (Litherland 1990). Substantial areas of woodland still persisted into this period, as recorded in the Domesday Book at both Moseley and Essington.

There are a significant number of moated sites within the area, the construction of which began during the middle of the 12th century. Some were associated with manors known to have been established prior to Domesday, such as those at Bushbury and Moseley, others may represent colonisation of the remaining woodland (ibid).

During the post-medieval period the area remained rural in character and was not part of the industrial development that characterised most of the rest of the West Midlands during the latter part of the period.

By the time of the first census at the beginning of the 19th century there were just over 750 people living at Bushbury and Essington. Of these, 420 people were receiving poor relief, that is, just over half the parish. This illustrates the relative poverty of the area at the time. By the beginning of the 20th century the population had risen to over four thousand. The influx of people was due in part to the construction of the railways in the middle of the 19th century.

3.2 Previous archaeological work

The Black Country Sites and Monuments Record (SMR) was consulted for documented sites and monuments within the proposed development area and a nominal 500m radius surrounding it. There are no nationally designated sites (such as Listed Buildings, Scheduled Ancient Monuments, Registered Battlefields or Registered Parks and Gardens) either within or adjacent to the development area. Two records are listed in the SMR which pertain to the current site. Both of these relate to the survey that was carried out by Litherland (1990). A small ridge was recorded in the western of the two fields (BCSMR 6832) and may indicate an earlier boundary. The western field was known as Underhill Croft (BCSMR 6833) on the Tithe Map, this may indicate the presence of a former farmstead or cottage. Some undulations were also noted in the field, these may have been caused by subsidence from earlier workings. A search was also undertaken of the National Monument Record (NMR) held by English Heritage. No additional records were noted. No features were noted on aerial photographs of the site.

The following table shows the sites and monuments listed in the HER and plotted on the map (Fig 2). The records in **bold** refer to those within the site.

Table 1: Historic Environment Record details

HER No	NGR: SJ	Details of results
539	9295 0321	Northycote Farm, Underhill Lane
2539	9257 0318	Homestead Moat at the junction of Pendrill and Wentworth Road; now destroyed
2574	9330 0250	Bronze Age axe found at Keats Road
5858	9561 0104	Wyrley and Essington Canal completed 1794 (not ill)
6823	9270 0243	Field 5, Bushbury survey; linear earthworks that may be a fairly recent building platform related to the nearby farm buildings
6824	9294 0248	Field 6 and 7, Bushbury survey; reservoir
6827	9260 0259	Field 10, Bushbury survey; W area called 'Brick Yard' on tithe. Adjacent to Bushbury Hall Farm. Line of old boundary identified in fields 5 & 9 is more apparent, as is disused road. 2 mounds, one possible backfilling, one possible old extension to farm buildings. To E of field is massive banked boundary of ancient appearance
6828	9282 0262	Field 11; has been subject to ploughing. E boundary appears to have been altered to accommodate reservoirs. W boundary is continuation of high-banked boundary of fields 5, 9, 10. Topographical information given by Stebbing Shaw indicates that there may have been an open field to N of Bushbury Hall, a possible location being between Bushbury Lane, Underhill Lane & the ridge over Bushbury Hill
HER No	NGR: SJ	Details of results
6829	9305 0260	Field 12; none of the boundaries appear old, pasture

		field
6830	9262 0270	Field 13; has been ploughed in past, causing periodic linear depressions. E boundary has pronounced bank - possibly old
6831	9270 0283	Field 14; sub-division of field 13. Curving track of cemetery suggestive of older boundary line, E boundary continuation of that in field 13. Currently ploughed - fieldwalking did not reveal significant material
6832	9303 0275	Field 15; small ridge across field probably indicates an earlier boundary. East boundary very steep bank which drops some 2-3m to E
6833	9320 0280	Field 16; called 'Underhill Croft' on tithe. Shares same bank as Field 15. Undulations possibly caused by subsidence
6834	9339 0284	Field 17; N boundary - small bank & ditch indicates probably been ploughed in past. All other boundaries modern
6835	9288 0296	Field 18; called 'Clay Pit Reeves' on Tithe. Site of new cemetery & crematorium - 1950s. Extensive landscaping. Remains of old quarry pit & possible field boundary given on Tithe map are discernible. Fruit trees in SW corner may be remains of orchard marked on tithe & 1937 OS map
6836	9306 0290	Field 19; called 'Stone Pit Flat' on Tithe. Part of crematorium, extended into this field in 1980s. Traces of track which ran over Bushbury Hill to Northcote farm just discernible (SMR 6860)
6837	9323 0295	Field 20; waste ground, extensive dumping into remains of old ponds. N boundary possibly quite mature
6838	9340 0300	Field 21; N boundary probably old - incorporates a number of old oak trees, hedgerow & a bank
6839	9275 0320	Field 22; playing field, much landscaped, modern boundaries, probably built after WWII. W side - 2 sides of rectangular shaped ditch, but unlikely that it represents surviving outline of moat known to have been located in this approximate area
6840	9322 0307	Field 23; called 'Brick Kiln Field' on tithe. Irregular undulations. E end of N boundary quite mature, with traces of inverted S-shape. NW corner, possibly remains of backfilled pond
6841	9338 0316	Field 24; modern drains at E end of field & pronounced drop down to brook, where there are patches of thicket & old trees. To N & S are other old field boundaries
6843	9315 0317	Field 26; to S of Northcote Farm. Pond at W end of field, obscured by recent dumping. N boundary old, very high bank, almost large enough to be a pale boundary, separating field from parkland of Moseley Court to N. Continues into field 27 to NE. If it is of early 19th-century origin, it represents an unusually late adoption of such a garden feature in an estate designed to reflect modernity of its owners. Possibly pre-dates parkland attached to Moseley Court, & if so, marks an important land division
HER No	NGR: SJ	Details of results
6859	9292 0361	Sunken trackway, Northcote Lane. Of some antiquity,

		probably formed continuation of route across Bushbury Hill. Although line of this track has been modified, especially in early 19th century after Moseley Court was built, it exhibits the classic meandering, inverted S-shape probably derived from describing boundaries of early open fields. Parts of original course still visible as sunken tracks in fields 34 & 29
6866	9284 0242	The 'bury' element of the place-name 'Bushbury' is suggestive of there having been a hillfort in the area in the prehistoric period. If there was a hillfort in the Bushbury area, the most obvious location would be the top of Bushbury Hill
6864	9313 0300	Part of older road system of Bushbury - shown on Yates map of 1776, although now widened & modified
8714	9357 0232	Medieval settlement in Bushbury. Held by Underhill family for many generations. Ancient estate - 1327 - Thomas - under- the-hill, Richard Underhill. 1369 - Thomas Undurhulle. The homestead was at the foot of Bushbury Hill. Underhills held estate until c1617 when Sir Hercules Underhill sold it. Area now semi-detached & terraced council housing. Shown on 1837 map
10989	9310 0330	Northycote Country Park
10809	9318 0313	Proposal to construct "sconce" in Northycote Park
13512	92951 03262	Gatehouse to Moseley Court (BCSMR 1836).
13183	92927 02972	Bushbury crematorium; architect Lavender, Twentyman and Percy. Includes sculpture by Donald Potter both inside and outside. Built in 1954
13531	92938 03231	A Catholic chapel was built at Northycote, adjacent to the farmhouse by G.T. Whitgreave, owner of the adjacent Moseley Court
13651	93125 03092	A hole appeared in this area in 2006 and a watching brief was maintained during excavation of a trial pit to establish the cause. This demonstrated that the site had been quarried for sand and gravel in the early 20th century and the hole was likely to be the result of localised ground subsidence. A sand or gravel pit is shown here on the 3rd edition OS map of 1923

Little fieldwork has been carried out in the vicinity of the site. Knowledge of prehistoric activity is limited to the stray find of a Bronze Age axe head found in a garden in Keats Road. No Roman settlement is known of in the immediate area although the main Roman road from London to mid Wales passed to the north of Bushbury (Litherland 1990).

Homestead moat, recorded at the junction of Pendrill and Wentworth Roads may have represented one of a number of moated sites in the vicinity, thought to have been constructed during the colonisation of the remaining woodland in the parish (BCSMR 2539). Enclosure is thought to have been a drawn out and piecemeal event within the parish, which probably dated from the 16th century. However, an open-field known as 'Bushbury Great Field' was still in existence into the 18th century (BCSMR 6828). A survey of the Bushbury Green Wedge undertaken by Litherland (1990) identified a number of boundaries and features within the surrounding fields that may have

medieval origins. A major route from Chester to London is thought to have passed over the brow of Bushbury Hill (BCSMR 6859). The small lane to the west of the site may correspond to this ancient roadway.

The only development of the immediate vicinity was the construction of the crematorium and associated landscaping in the middle of the 20th century (BCSMR 13183).

Aerial photographs

Aerial photographs of the site were examined from both the NMR (English Heritage) and the Unit for Landscape Modelling (formerly CUCAP). A faint rectilinear cropmark can be seen on many of the photographs (which date from 1946 through to 1988) in the southern corner of the eastern field. This area corresponds with the area of ceramic debris found in the geophysical survey and may represent the remains of a building or possibly an in-filled pond. Since it is not shown on the historic maps, its demolition or filling may predate the end of the 18th century.

3.3 Historic Maps

Extracts from Yates' maps 1775 (Fig 3) & 1798 (Fig 4)

No field boundaries are marked on these early maps of the area, although many of the smaller hamlets and farms are marked. A road over Bushbury Hill is marked. No features are marked within the site area.

Extract from Ordnance Survey 1" County Series Map of Staffordshire 1828 (Fig 5)

No field boundaries are marked and there is little other detail. The route over Bushbury Hill is not marked.

Bushbury Tithe map 1848 (not illustrated; extracts from Litherland (1990) examined)

The field boundaries appear to be much the same as they are now. The eastern field is known as Underhill Croft. Both fields appear to be used for arable purposes. The eastern field is owned by the Whitgreave family, while the western field was in the ownership of the Escwicke family.

First edition Ordnance Survey map 1:2,500, 1884 (Fig 6)

The fields are much the same as at present. There is still no development of the surrounding area; it is still very rural. A pond is marked to the south of the site and Bushbury Hill is marked to the west.

Ordnance Survey 1:2,500, 1954-1957 (Fig 7)

The boundary between the two fields appears wider than in the First Edition Ordnance Survey map,

but little else has changed. However, the landscape surrounding the site has undergone large-scale residential development.

3.4 Conclusions

There are few prehistoric or Roman finds or features known from this area and although there was been Saxon settlement in the vicinity there does not appear to have been any within the site boundaries. Map evidence, along with recent field survey, suggest that the site was part of the medieval field system. However, the field name 'Underhill Croft' suggests that there may have been a small house or farmstead on the eastern field at some point prior to the 19th century. A small ridge across the western field may indicate a previous boundary. The lack of previous development indicates that any below ground archaeology may have survived, although previous agricultural regimes may have destroyed any remains close to the surface. The presence of a possible former farmstead has been posited by a previous survey (Litherland 1990). The geophysical survey (this document) highlighted an area of ceramic debris in the south of the eastern field; this may indicate the demolition spread relating to this building.

4 METHODOLOGY

Geophysical survey was carried out in accordance with the standard Northamptonshire Archaeology methodology and English Heritage and the Institute For Archaeologists Guidelines (EH 2008 & Gaffney, Gater and Ovendon 2002). Two fields were subject to geophysical survey.

Detailed Gradiometer Survey

All detailed magnetometer survey was undertaken using Bartington Grad601-2 fluxgate gradiometers. The Grad601-2 is constructed as a dual-sensor instrument with two vertical gradiometers separated on a yoke to enable two lines of survey to be recorded in tandem.

Two fields were surveyed in detail, Fields 1 and 2. The detailed gradiometer survey was composed of a total of 64 whole and partial, 30m x 30m grid-squares. Each grid square was traversed at rapid walking pace in zigzag mode; and data was recorded every 0.25m along traverses spaced at 1.0m separations. All fieldwork was carried out in accordance with the aforementioned guidelines (EH 2008 & Gaffney, Gater and Ovendon 2002).

The data was analysed using Geoplot 3.00u software. Low (negative) magnetism is shown as white and high (positive) magnetism as black in the resultant greytone plots. To avoid the introduction of

processing errors, minimal manipulation was carried out on the data. The 'Zero Mean Traverse' function was applied in order to bring the average level of each data line into a balanced zero.

The processed data is presented here in the form of a greyscale highlighting the weaker magnetic anomalies (-3nT / +3nT scale; Fig 8) georectified to the Ordnance Survey base. Interpretative plots have been generated from the results (Fig 9) both sets of figures are referred to directly in the following section.

5 GRADIOMETER SURVEY RESULTS

Detailed Gradiometer Survey

The survey did not identify any significant archaeological remains in either field.

Field 1 (Figs 8 & 9)

The survey identified a 300mm water main orientated north-north-east to south-south-west bisecting the field. A second, smaller ferrous pipe was also identified by the survey. It is orientated north-east to south-west. In the north of the survey area a single ferrous object was identified. An area of mixed dipolar signals indicating likely ceramic debris, possibly brick and tile building rubble, was detected in the south of the field. This could represent a spread of debris from a demolished building, or possibly an in-filled quarry or pond. Both features were of unknown origin.

Field 2 (Figs 8 & 9)

The field is bisected by an underground 12" Gas Pipeline. It is orientated north-west to south-east. In the western part of the survey area, the large ferrous object identified is a cattle trough. However, the ferrous object detected in the northern part of the field is of unknown origin.

6 CONCLUSION

Geophysical survey did not identify any significant archaeological remains. However, it was successful in mapping modern services. It was not possible to survey the bank that separates the two fields so its nature and date remain unclear. However, as pointed out in the Historical and Archaeological Background (3.4, above), the building debris identified in Field 1 may result from a demolished farmstead, although no distinct pattern was identified.

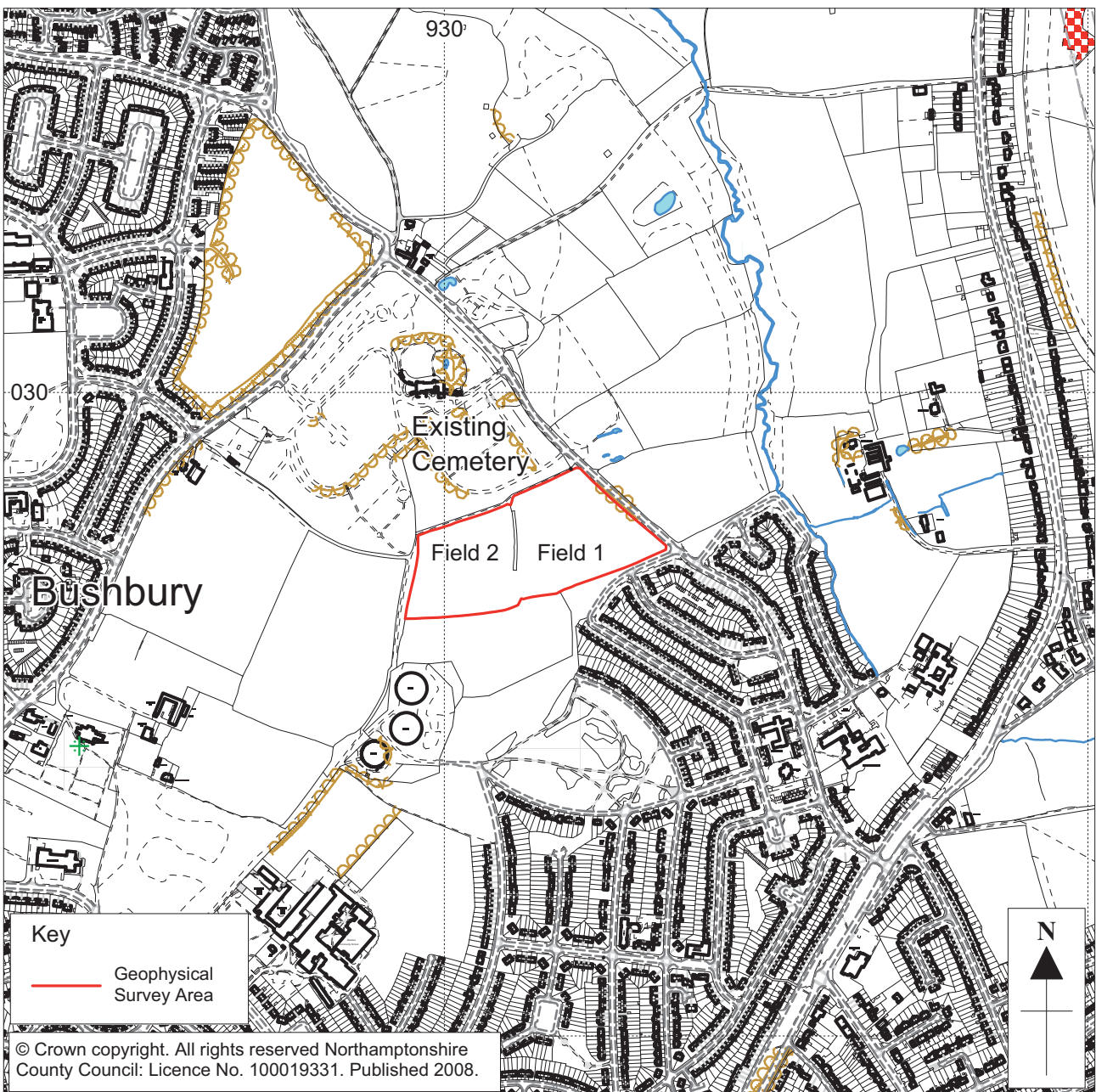
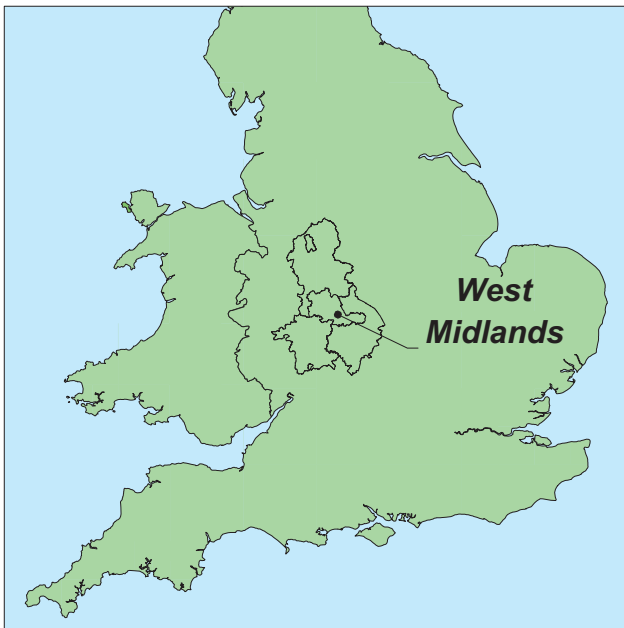
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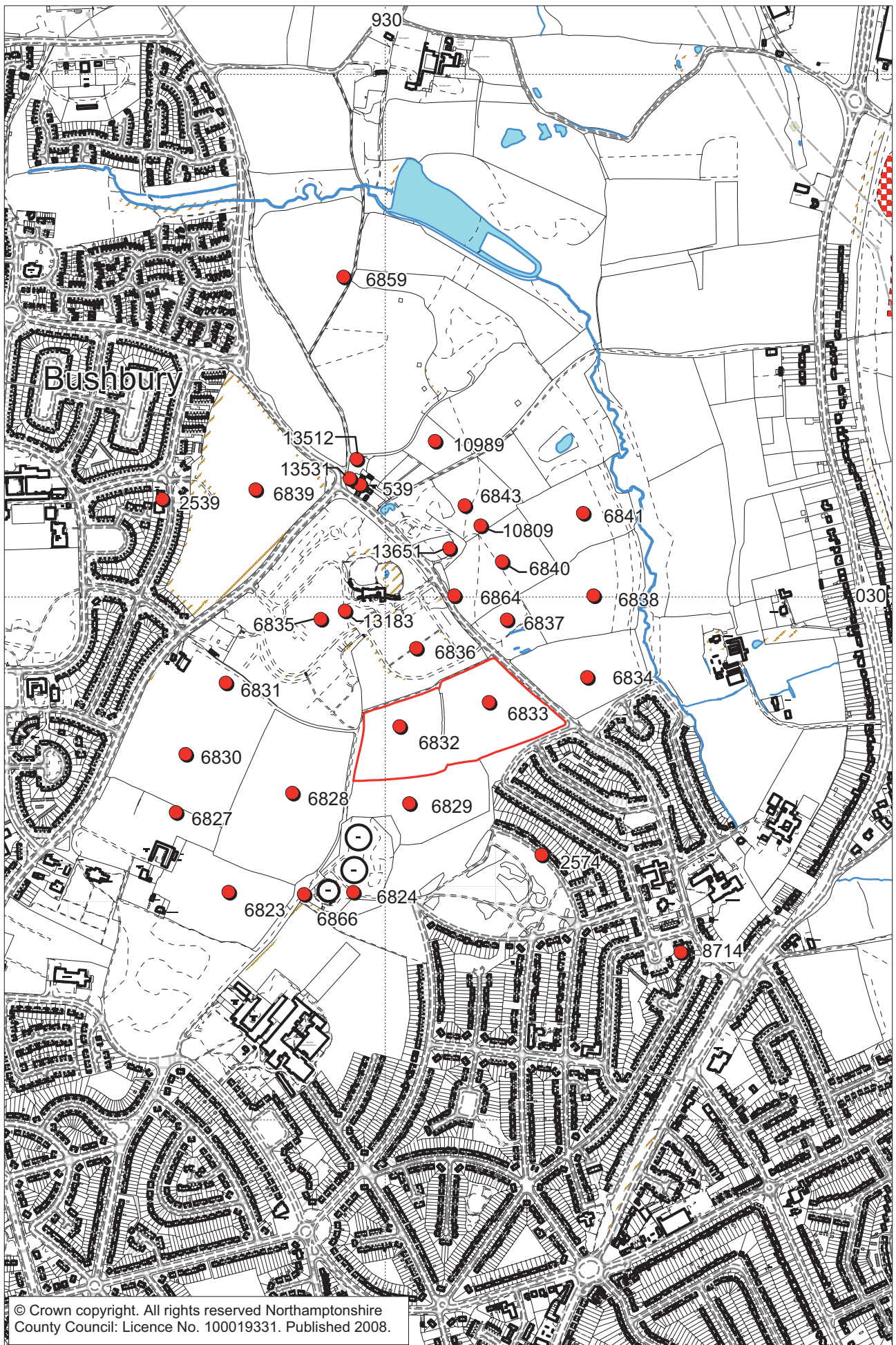
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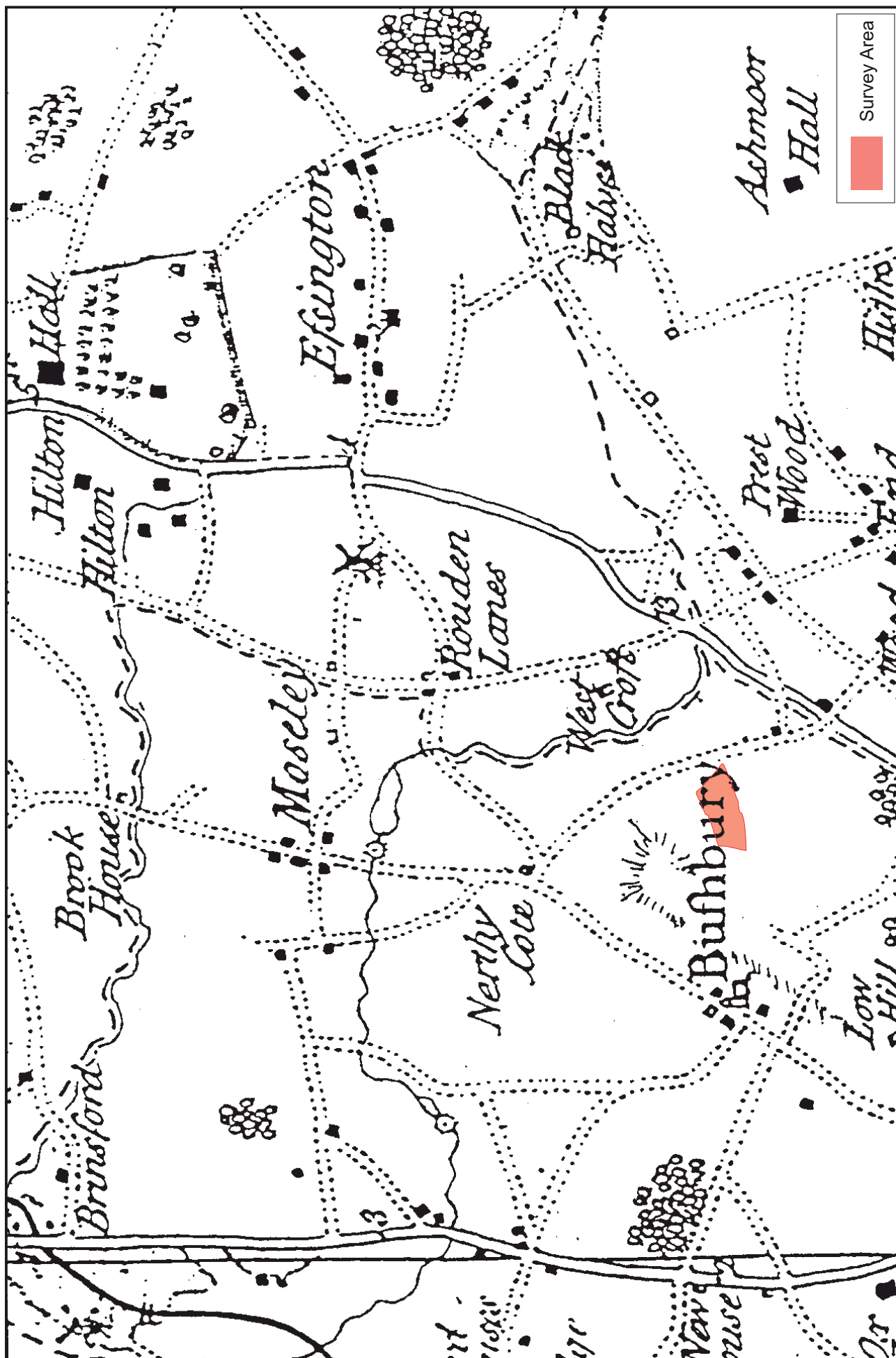
Site Location

Fig 1



Scale 1:10,000

Sites and Monuments Record points Fig 2



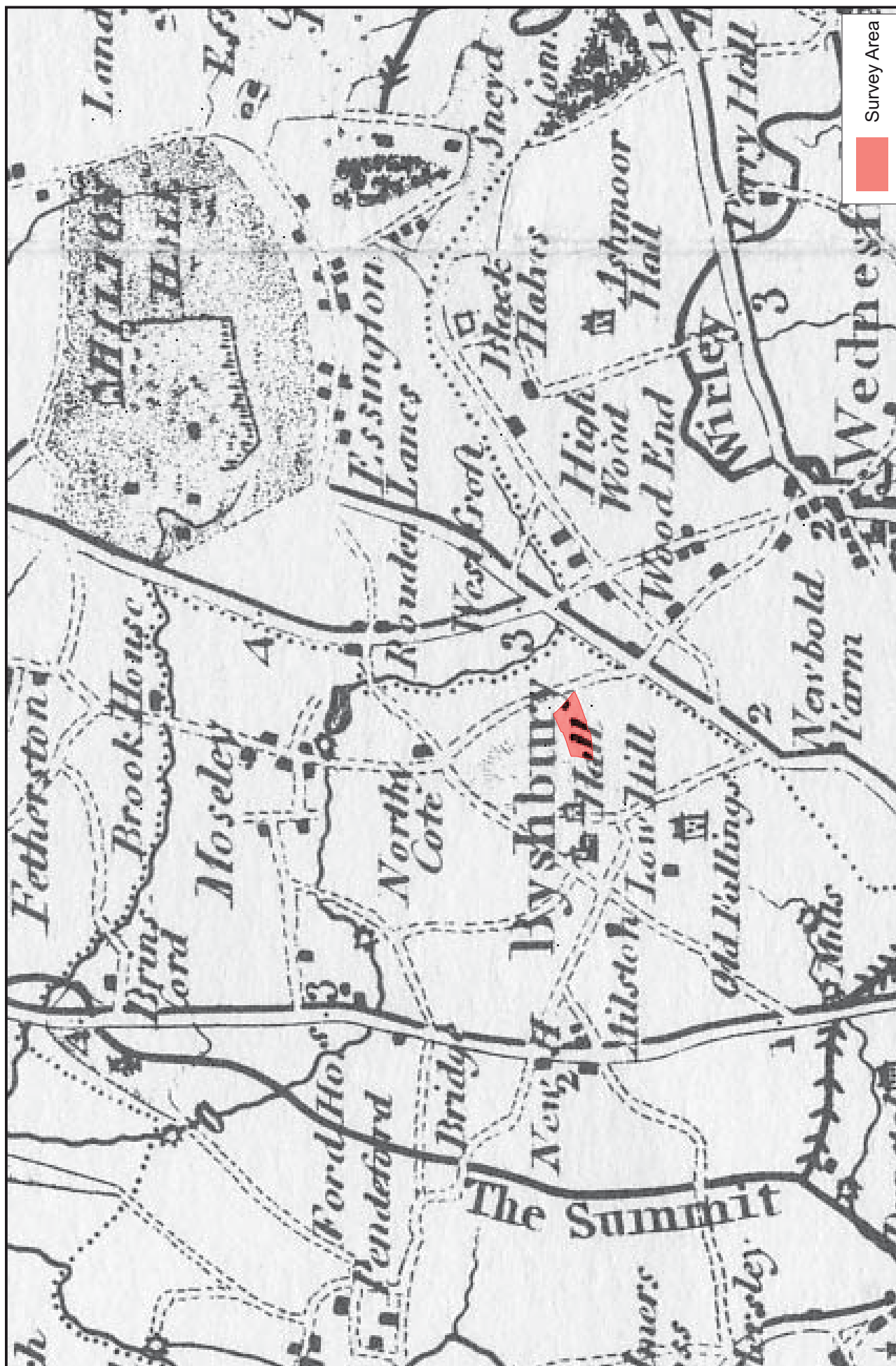
Extract from Yates Map c1775

Fig. 3



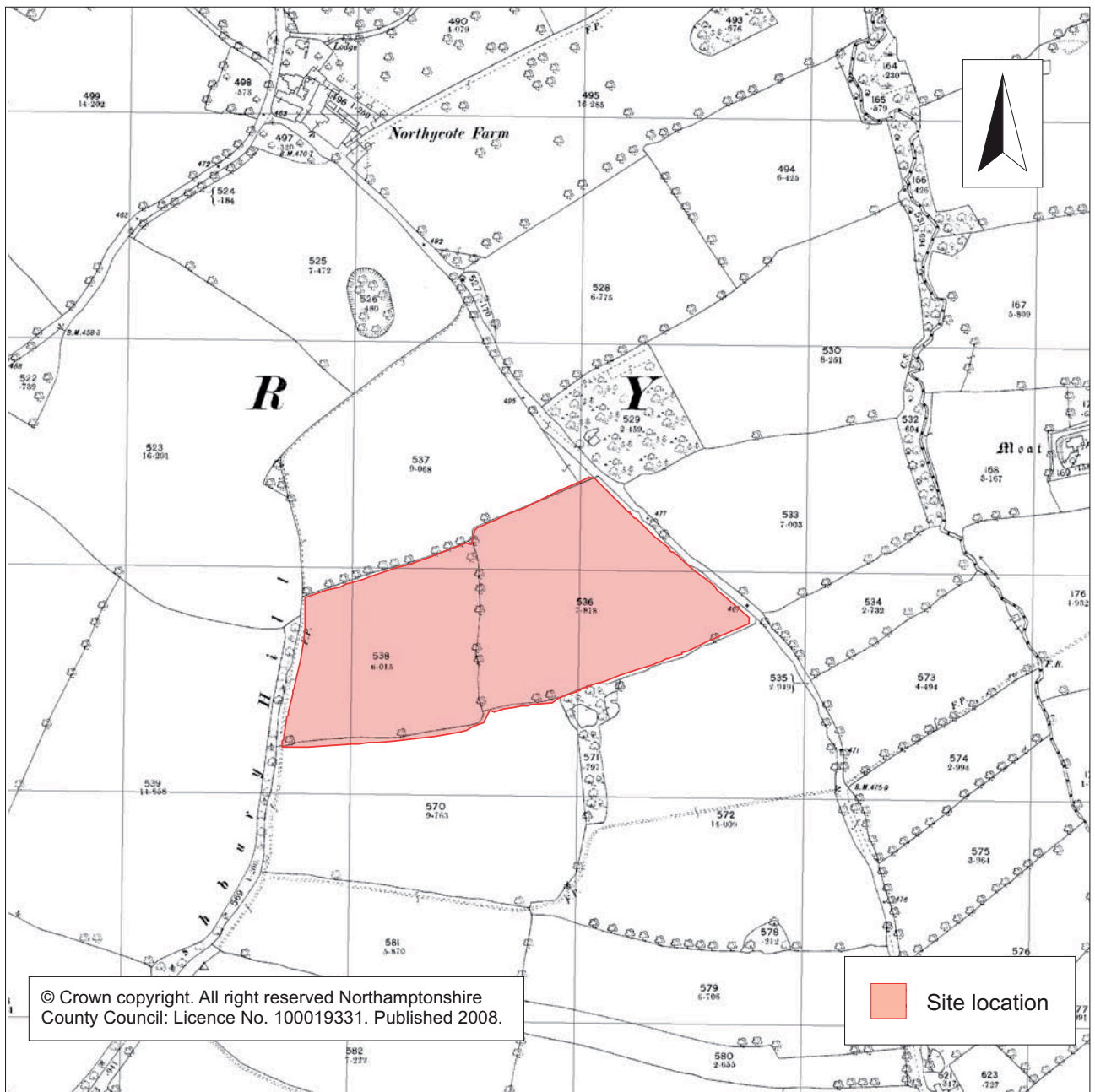
Extract from Yates Map 1798

Fig. 4

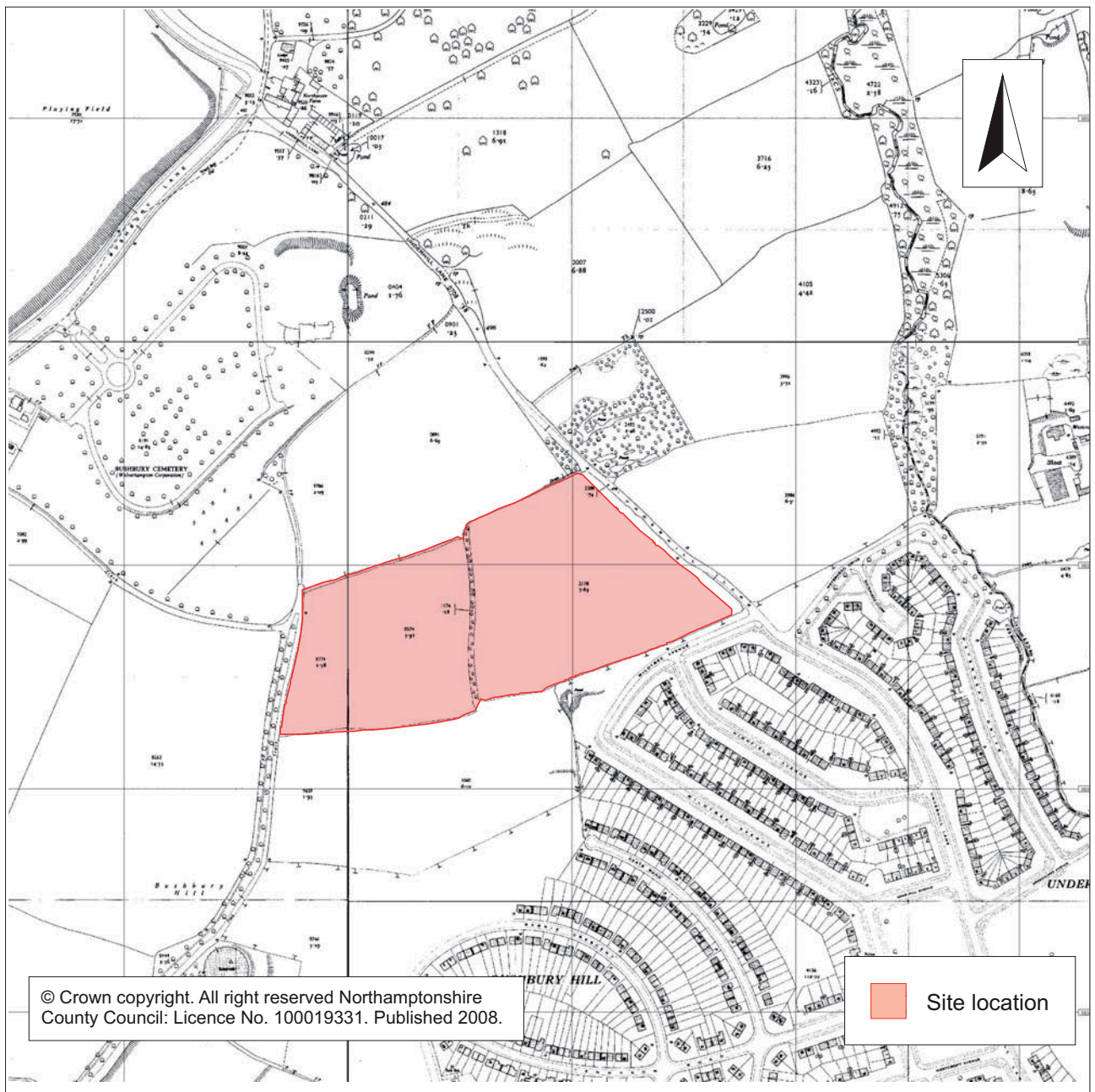


Extract from Ordnance Survey 1" County Series Map of Staffordshire 1828

Fig. 5



First Edition Ordnance Survey map, 1884 Fig 6

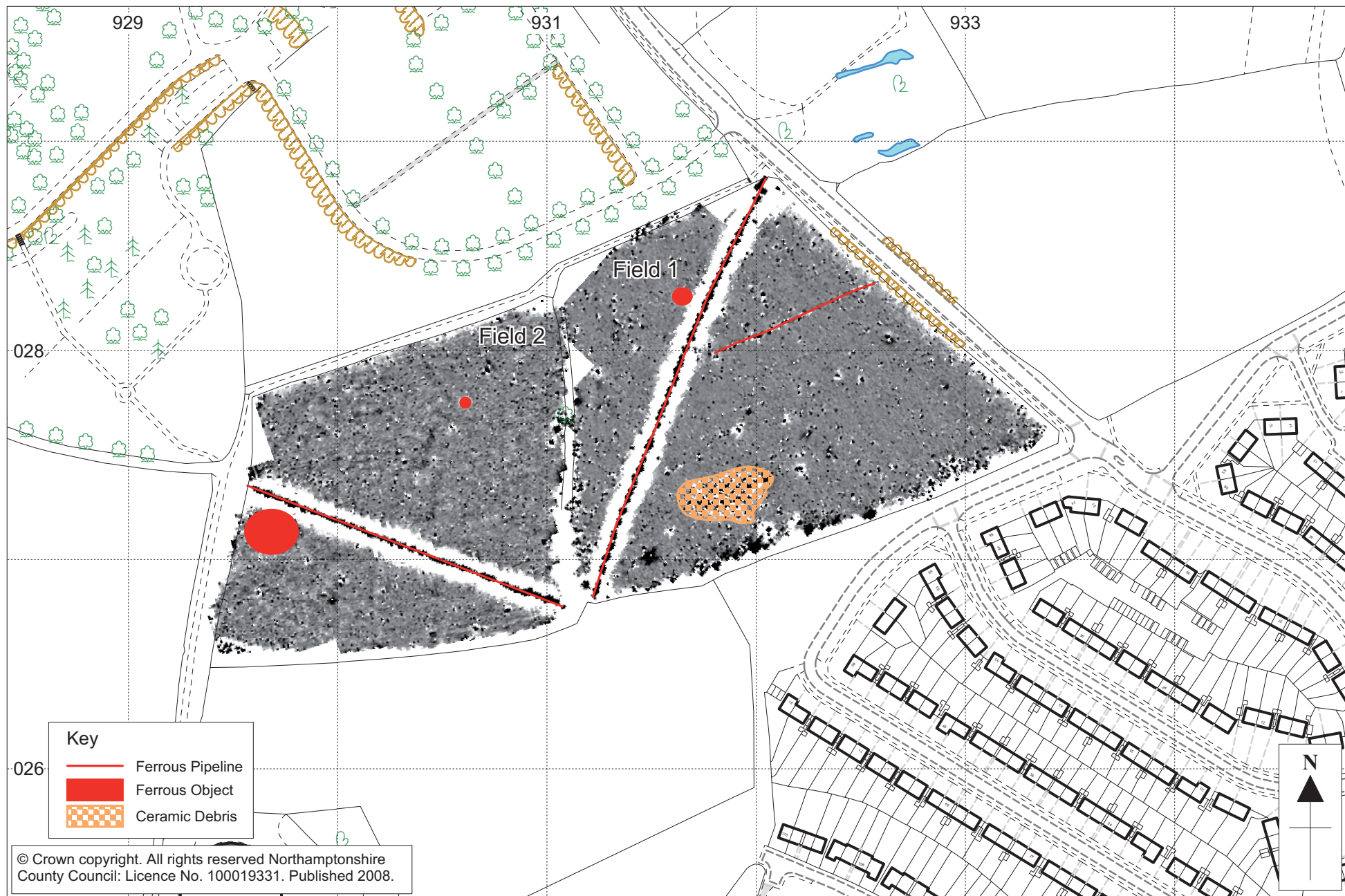


Ordnance Survey map, 1954-1957 Fig 7



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Geophysical Survey Results Fig 8



1:2500 @ A4

Geophysical Survey Interpretation Fig 9