

EVENT ELI 8369

SOURCE SLI 11704

PRN 62454

PRN 65243

PRN 65244

PRN 65245

MODERN

M5/20

UNDATED

**SWINDERBY AIRFIELD
SWINDERBY AND THURLBY
LINCOLNSHIRE**

**ARCHAEOLOGICAL DESK-BASED
ASSESSMENT**

For

CEMEX

CA REPORT: 05101

JUNE 2005

COTSWOLD
ARCHAEOLOGY



acknowledgement of receipt sent 4/4/06
jason will

Conservation
Services

06 APR 2006

Highways & Planning
Directorate

CONTENTS

1.	INTRODUCTION.....	5
----	-------------------	---

2.	METHODOLOGY.....	5
----	------------------	---

3.	BASELINE SURVEY.....	7
----	----------------------	---

	Local planning guidance.....	7
--	------------------------------	---

	Designated Cultural Heritage Sites.....	7
--	---	---

	Geology, topography and the palaeoenvironment.....	8
--	--	---

	Previous archaeological work.....	8
--	-----------------------------------	---

	Prehistoric.....	8
--	------------------	---

	Roman.....	8
--	------------	---

	Early Medieval.....	8
--	---------------------	---

	Medieval.....	8
--	---------------	---

	Post-medieval.....	8
--	--------------------	---

	Modern.....	8
--	-------------	---

	Unsettled.....	10
--	----------------	----

	Modern Landmarks.....	11
--	-----------------------	----

4.	ANALYSIS.....	12
----	---------------	----

	Political.....	12
--	----------------	----

	Social.....	13
--	-------------	----

	Economic.....	14
--	---------------	----

5.	CONCLUSIONS.....	14
----	------------------	----

	Summary.....	14
--	--------------	----

	Recommendations.....	14
--	----------------------	----

6.	APPENDICES.....	15
----	-----------------	----

SWINDERBY AIRFIELD SWINDERBY AND THURLBY LINCOLNSHIRE

CULTURAL HERITAGE ASSESSMENT

COTSWOLD ARCHAEOLOGY CA PROJECT: 1960

Author:	Gail Stoten
Approved:	Neil Holbrook
Signed:
Issue: 01	Date: 15 June 2005

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

CONTENTS

1.	INTRODUCTION.....	5
2.	METHODOLOGY.....	5
3.	BASELINE SURVEY.....	7
	Local planning guidance.....	7
	Designated Cultural Heritage Sites	7
	Geology, topography and the palaeoenvironment.....	8
	Previous archaeological work.....	8
	Prehistoric.....	8
	Romano-British	8
	Early Medieval	9
	Medieval	9
	Post-medieval	9
	Modern.....	9
	Undated	10
	Historic Landscape.....	11
4.	ANALYSIS	12
	Potential.....	12
	Survival.....	13
	Importance.....	14
5.	IMPACT	14
	Ongoing processes	14
	Impact of proposed development.....	14
6.	MITIGATION.....	15
7.	PROJECT TEAM	15
8.	REFERENCES	15

APPENDIX A: GAZETTEER OF RECORDED ARCHAEOLOGICAL SITES 17

APPENDIX B: EXTRACT FROM THE HEDGEROWS REGULATIONS 1997 19

Location: Swinderby and Thurlby, Lincolnshire

NGR: SK 8800 5170

LIST OF ILLUSTRATIONS

- Fig. 1 Site location plan (scale 1:25, 000)
- Fig. 2 Known cultural heritage (1:12,500)
- Fig. 3 The historic landscape (based on the Second Edition Ordnance Survey map of 1906 and the Second Edition Ordnance Survey map of 1921)
- Fig. 4 Airfield structures
- Fig. 5 The control tower, looking north
- Fig. 6 The look-out mound with gun emplacement, looking south

Four groups of undated cropmarks are visible on aerial photographs of the site and a fifth group lies immediately to the east. Some of these appear to be of modern origin, but others may indicate the presence of features of prehistoric or Roman date. Trees at the west of the site are visible on aerial photographs taken after the construction of the airfield, but the vegetation and trees on an aerial photograph of 1936 may have been destroyed by the construction of the airfield in 1941. Any features corresponding with the site from the period of cropmarks to the east will have been destroyed by trees growing in this area.

The route of a possible Roman road passes through the south-western side of the site, joining with the route of the Great Ouse which runs immediately to the north-east. The site is located within a low-lying area, which is mostly flat, and is surrounded by the Great Ouse.

The site is located on the edge of the Lincolnshire Wolds, a low-lying area of land which is mostly flat, and is surrounded by the Great Ouse. The site is located on the edge of the Lincolnshire Wolds, a low-lying area of land which is mostly flat, and is surrounded by the Great Ouse.

It is noted that the Lincolnshire Wolds are a low-lying area of land which is mostly flat, and is surrounded by the Great Ouse. The site is located on the edge of the Lincolnshire Wolds, a low-lying area of land which is mostly flat, and is surrounded by the Great Ouse. The site is located on the edge of the Lincolnshire Wolds, a low-lying area of land which is mostly flat, and is surrounded by the Great Ouse.

SUMMARY

Site Name: Swinderby Airfield
Location: Swinderby and Thurlby, Lincolnshire
NGR: SK 8800 6170
Type: Cultural Heritage Assessment

In April 2005 Cotswold Archaeology was commissioned by Cemex to carry out a Cultural Heritage Assessment of land at Swinderby Airfield, Swinderby and Thurlby, Lincolnshire. The objective of the assessment was to identify the nature and extent of the recorded archaeological resource within both the site and its immediate environs.

Four groups of undated cropmarks are visible on aerial photographs of the site and a fifth group lies immediately to the west. Some of these appear to be of modern origin, but others may indicate the presence of features of prehistoric or Roman date. Three of the sets of cropmarks within the airfield are visible on aerial photographs taken after the construction of the airfield, but the westernmost set, seen on an aerial photograph of 1933, may have been disturbed by the construction of the airbase in 1940. Any features encroaching into the site from the set of cropmarks to the west will have been disturbed by trees growing in this area.

The route of a possible Roman road passes through the south-western side of the site, joining with the route of the Fosse Way which runs immediately to the north-west. Any road deposits which were present will have been at least partially disturbed by the construction of the airfield features.

The site lies within the area of RAF Swinderby, a Second World War airfield, of which the runways and a few buildings survive. Most of the airbase buildings lay to the east of the site, some of which have now been demolished.

Historic maps show that the Skelmire drain ran through the north-east of the site and several 19th-century farms and dwellings were also present, prior to the construction of the airfield. Evidence of these features may survive beneath current ground level. Some hedgerows present on the site have statutory protection under the Hedgerow Regulations 1997 and other may be considered of some cultural heritage interest by the local authority.

There is currently insufficient evidence on the nature of any deposits indicated by the cropmarks to assess their importance. Should evidence of the Roman road, 19th-century structures or the Skelmire drain survive, they would be of local importance. The hedgerows present within the site which have statutory protection and those which are of some cultural heritage interest are of local importance. The surviving airfield structures are also of local importance, as they are neither Listed nor included on North Kesteven District Council's list of Sensitive buildings.

It may be necessary for evaluation through geophysical survey or trial trenching to take place in the areas of the site where cropmarks are visible and their immediate vicinity, and along the route of the putative Roman road, in order to determine the character, extent and survival of any deposits present. Depending on the results of the evaluation, further recording prior to mineral extraction may be required. It may be necessary for a record to be made of any airfield structures which are to be demolished during the proposed works.

1. INTRODUCTION

- 1.1 In April 2005, Cotswold Archaeology (CA) was commissioned by Cemex to carry out a Cultural Heritage Assessment of land at Swinderby Airfield, Swinderby and Thurlby, Lincolnshire (centred on NGR: SK 8800 6170; Fig. 1). The objective of the assessment was to identify the nature and extent of the recorded archaeological resource within, and in the immediate environs of, the site. An analysis of the likely nature and extent of any currently unrecorded archaeological deposits within the area of interest is also offered.

- 1.2 The report is structured as follows:

Section 2 *Methodology* outlines the data sources accessed for the baseline survey and the guidelines followed during the preparation of the Cultural Heritage Assessment;

Section 3 *Baseline Survey* identifies any local planning guidance and describes the extent and character of the known archaeological and historical resource within the area of interest and the wider locality. The focus of the assessment is on the land lying within the defined area of interest (henceforth termed the 'site') as marked on Fig. 2, although the resource of the wider vicinity is also addressed;

Section 4 *Analysis* assesses the survival, potential and importance of any archaeological deposits present;

Section 5 *Impact* considers the ongoing processes of erosion within the site and predicts the impact of the proposed scheme on the cultural heritage resource;

Section 6 *Mitigation* considers further investigations which may be appropriate as mitigation.

- 1.3 The site is approximately 179ha in area, and comprises the runways, taxi-ways and hard-standing areas of Swinderby Airfield. Two areas of woodland, Bingham's Holt and Kelham's Holt, are also present within the site.

2. METHODOLOGY

- 2.1 This assessment has been guided by the *Standard and Guidance for Desk-Based Assessments* issued by the Institute of Field Archaeologists (IFA 1999), Appendix 10 of the Good Practice Guide for the preparation of Environmental Statements issued by the former DoE (1995) and *Environmental Impact Assessment: a Guide to*

Procedures issued by the National Assembly for Wales and the former DETR (2000).

- 2.2 The baseline survey involved consultation of readily available archaeological and historical information from documentary and cartographic sources. The major repositories of information consulted comprised:

English Heritage

- County list of Scheduled Ancient Monuments for England (SAMs)
- Register of Parks and Gardens of Historic Interest
- Register of Historic Battlefields
- List of Buildings of Special Architectural or Historic Interest

Lincolnshire County Sites and Monuments Record

- List of known archaeological sites and findspots within the county

Lincolnshire Archives

- Historic maps and documents

National Monuments Record (English Heritage, Swindon)

- Vertical and oblique aerial photographic records
- Published and unpublished documentary sources

- 2.3 All points of cultural heritage interest found in the baseline survey are located on Fig. 2. The gazetteer (Appendix A) correlates points of interest with their reference number on the Sites and Monuments Record (SMR), as well as any other relevant statutory designation or status. Points of interest are marked in bold in the body of the text thus, **00**.

- 2.4 A site visit was made on 4 May 2005 in order to examine current land use and topography, and to assess the visible cultural heritage resource of the site.

- 2.5 The following section, *Baseline Survey*, identifies in chronological order the recorded archaeological resource within the site and its immediate vicinity.

3. BASELINE SURVEY

Local planning guidance

3.1 The North Kesteven Local plan (draft deposit June 2003) contains the following policies relating to archaeology:

- *Policy HE1 – Sites containing nationally important archaeological remains.* Planning permission will not be granted for proposals that will ~~not~~ adversely affect the archaeological value or interest, or the setting, of a Scheduled Ancient Monument (as shown on the proposals map) or other site containing nationally important archaeological remains.
- *Policy HE2 – Archaeological assessment and evaluation.* Planning applications affecting a site where evidence suggests that archaeological remains are likely to be present must be accompanied by an assessment identifying the extent and importance of any remains, together with any proposals for their protection or to mitigate adverse effects.
- *Policy HE3 – Sites containing archaeological remains.* Planning permission will be granted for proposals that will affect locally or regionally important archaeological remains or their setting, provided that:
 1. The remains will be preserved in situ, and will not be damaged; or
 2. Where preservation in situ is not justified, the recording and/or excavation of the remains prior to and during development is assured (by means of an agreement between the developer and the Council or by means of a condition upon the permission)

Designated Cultural Heritage Sites

3.2 Designated Cultural Heritage Sites are as follows:

- *International Designations:* No World Heritage Sites or sites included on the Tentative List of Future Nominations for World Heritage Sites issued by the Secretary of State for Culture, Media and Sport are present within or in the vicinity of the site.
- *National Designations:* No Scheduled Ancient Monuments, Listed Buildings (both statutory), Parks and Gardens of Special Historic Interest, Registered (or proposed) Battlefields or Battle Sites are present within or in the immediate vicinity of the site.
- *Local Designations:* Twenty-nine sites recorded on the Lincolnshire Sites and Monuments Record lie in the vicinity. One of these, Swinderby Airfield, lies

partially within the site. None of the buildings present on the site are included on North Kesteven District Council's list of Sensitive buildings.

Geology, topography and the palaeoenvironment

- 3.3 The site lies within an area of Older River Sand and Gravel of the Pleistocene and Recent periods (BGS 1973).

Previous archaeological work

- 3.4 A programme of fieldwalking took place in several fields either side of the Fosse Way in 1991, in response to a proposed scheme to turn the route into a dual carriageway (Fig. 2, 1a-1j; TPAT 1991). This programme recovered artefacts dating from the Roman to Post-medieval periods in the vicinity of the site, which are discussed in the relevant chronological sections below. Another programme of fieldwalking was carried out in an area to the east of the site in 1998, which recovered post-medieval and modern material (Fig. 2, 2; JSAC 1998).

- 3.5 An area to the south-east of the site was the subject of archaeological evaluation, excavation and watching brief between 1999 and 2003 (Fig. 2, 3; LAS 2004). In the areas closest to the site, these investigations uncovered modern and undated features. A walkover survey was carried out along the line of a proposed recharge trench to the south of the site in 1994, which identified no features, and an assessment was made of the same area in 1999, which identified post-medieval ridge and furrow earthworks (Fig. 2, 4; OAA 1994, OAA 1999).

Prehistoric

- 3.6 No features of definite prehistoric date have been uncovered in the vicinity of the site. No prehistoric flint or pottery was recovered during an extensive programme of field-walking in the vicinity of the site (Fig. 2, 1a-1j; TPAT 1991). Possible evidence of prehistoric activity is discussed in *Undated*, below.

Romano-British

- 3.7 The site lies immediately to the south-east of the Fosse Way (Margary 1973, road 5f, Fig. 1, 5), between the Roman settlement sites at Lincoln and Brough. The route of a postulated branch road bisects the site (Fig. 1, 6; OAA 1999, 19), although this is putative (it is not included in Margary's survey). The site of a villa lies 1.5km to the south-west (Fig. 1, a).

- 3.8 A Roman coin, a 4th-century bronze issue of Constantine, was found to the north (Fig. 2, 7; LSMR). Roman pottery was recovered in the vicinity of this findspot during fieldwalking in 1991 (Fig. 2, 1j; TPAT 1991).

Early Medieval

- 3.9 The village of Swinderby lies approximately 1km to the north-west of the site. The village was recorded in the Domesday survey, and the name has Danish and Norse elements (Fig. 2, 8; Cameron 1998).

Medieval

- 3.10 The church at Swinderby has 12th, 13th and 15th-century fabric in its structure (Fig. 2, 9; LSMR). An area of medieval ridge and furrow earthworks was present to the east of the site (Fig. 2, 10; LSMR). Medieval pottery was recovered during fieldwalking to the north-east of the site (Fig. 2, 1i; TPAT 1991).

Post-medieval

- 3.11 Several post-medieval buildings are present in the vicinity of the site. Most of these are located in the village of Swinderby and many are Grade II Listed (Fig. 2, 11-23; LSMR). The Halfway Houses, a Grade II former post-medieval farmhouse, is present to the north (Fig. 2, 24; LSMR). Another post-medieval farm is present to the south-west, which contains two Grade II Listed structures (Fig. 2, 25; LSMR).

- 3.12 Post-medieval finds were recovered from several fields either side of the Fosse Way, during fieldwalking in 1991 (Fig. 2, 1a, 1b, 1d-1i; TPAT 1991). Post-medieval material was also recovered during field-walking to the east of the site (Fig. 2, 2; JSAC 1998).

- 3.13 An area of woodland to the south is designated as Ancient Woodland (land that has had continuous woodland cover since at least AD1600) (Fig. 2, 26; LSMR).

Modern

- 3.14 The site comprises most of Swinderby Airfield, a former RAF base, including the runways, taxi-ways and hard-standing for planes (Fig. 2, 27; LSMR). The main complex of airfield buildings, including the hangars, lay to the east of the site, although some of these have now been demolished. It was constructed in 1940 and used as a base for bombers including Wellingtons and Lancasters. Following the war, it was used as a training base but closed as an airfield in the 1990s. The site is

3.20 now used occasionally for commercial activity. The surviving airfield features are discussed below in *Historic landscape and buildings*.

3.15 Modern material was recovered during fieldwalking to the east of the site in 1998 (Fig. 2, JSAC 1998). Modern features were uncovered to the south-east of the site during a watching brief (Fig. 2, 1a; LAS 2004).

Undated

3.16 Several groups of undated cropmarks are present within and in the vicinity of the site. The presence of archaeological features in these areas has not yet been confirmed by archaeological field works, but it has been suggested that some of the marks indicate the presence of prehistoric or Roman settlement (LSMR). Four groups of cropmarks are present within the site. One group of these, seen on an aerial photograph of 2001, is of a very regular nature, suggesting that the cropmarks relate to modern airfield related features (Fig. 2, 28). A group at the centre of the site, seen on an aerial photograph of 1948 appears to comprise four possible enclosures and is more likely to indicate archaeological features (Fig. 2, 29). Further to the east, a group of several linears are visible on a photograph of 1968 (Fig. 2, 30), a few of which appear to relate to post-medieval field boundaries. A group of cropmarks at the west of the site comprises possible enclosures and linear features, seen on a photograph of 1933 (Fig. 2, 31).

3.17 A possible enclosure is visible as a cropmark to the south-west of the site (Fig. 2, 32; LSMR). Several more possible cropmarks are visible between this cropmark and cropmarks within the site, on a photograph of 1991 (Fig. 2, 33). Another possible cropmark enclosure is present to the north of the site (Fig. 2, 34; LSMR).

3.18 Two undated banks are present to the north-east of the site; a bank with flanking ditches parallel to the Fosse Way (Fig. 2, 35; TPAT 1991) and a bank and ditch parallel to a branch road (Fig. 2, 36; TPAT 1991). It has been suggested that the latter feature predates the Fosse Way, which appears to have been cut through the bank (TPAT 1991).

3.19 An undated stone pillar was found in a plantation to the west of the site (Fig. 2, 37; LSMR). It has been suggested that it was a Roman boundary stone, although there is no evidence to support this.

- 3.20 Undated ditches were observed during a watching brief to the south-east of the site (Fig. 2, 3b; LAS 2004). These may have been recent drainage features or field boundaries.

Historic Landscape

- 3.21 The first cartographic source to depict an area of the site is a map of the parish of Thurlby of 1729, the boundaries of which have been transposed onto Fig. 3. This shows that the area of the site within Thurlby Parish was divided between four large plots prior to enclosure; The Great Plot, Skelmires, The Moor and The Oak Hill Close. A drainage channel, the Skelmire Drain, is depicted running through the north-eastern area of the site (Fig. 3). Where hedgerows are present along the boundaries of these plots, they have statutory protection under the Hedgerow Regulations 1997, as they are part of a pre-enclosure landscape. The hedgerow along the side of the Fosse Way is likewise protected (The relevant portion of the hedgerow regulations has been reproduced in Appendix B).
- 3.22 The Thurlby Tithe Map of 1838 shows the layout of the fields following enclosure, and their fieldnames (Fig. 3). None of these names are suggestive of previously unknown archaeological sites. The name *Rampart Close* is likely to refer to the proximity of the Roman road. This source depicts two farms within the site area, Skelmire Farm and Bell Lane Farm, which have now been demolished. Where hedgerows survive along the boundaries depicted on this source, they may be considered of some cultural heritage interest by the local authority (Fig. 3), as they are depicted on a source predating 1845.
- 3.23 The first cartographic source to depict the remainder of the site is the Swinderby Tithe Map of 1851. This shows few fields in their entirety, and only three fieldnames within the site (Fig. 3). Again, none of these names are suggestive of archaeological deposits being present. Four groups of buildings, at least one of which was a farm, are depicted on this map, adjacent to the Fosse Way. These have all since been demolished.
- 3.24 Ordnance survey maps of 1906 and 1921 provide the first accurate coverage of the site (Fig. 3). These show that more buildings had been added to most of the groups depicted on the Tithe Maps and another group of buildings had been constructed to the east of Bell Lane, again adjacent to the Fosse Way. Some additional field boundaries had been laid out at the south-east of the site (Fig. 3).

- 3.25 Aerial photographs of 1941 show the airfield, which had been constructed in 1940. The control tower did not appear to have been constructed by this date, nor the look-out mound. The concrete run-ways also appeared to be absent, and may have been a later addition to the airfield. These features are all visible on an aerial photograph of 1947 and are all extant (Figs 4-6). Additional small buildings which have now been removed can be seen on aerial photographs of 1948 (Fig. 4). More small structures had been constructed by 1959, some of which are still extant including two sheds and a water-filled tank (Fig. 4). An additional building is visible on an aerial photograph of 1973 (Fig. 4).
- 3.26 A couple of additional structures were observed during the site visit. An area of rubble at the south-eastern corner of the site may have been a demolished structure and a group of recently constructed sheds were present to the south-west of the rubble (Fig. 4).

4. ANALYSIS

Potential

- 4.1 The undated cropmarks present within the site (Fig. 2, 29-31) may indicate the presence of archaeological deposits, most likely of prehistoric or Roman date. Areas of gravel are common locations for such sites. However, some of the cropmarks, such as 28, are of probable modern origin and other linear marks, such as some of those at 29, are likely to show the location of now-removed post-medieval field boundaries. A fifth area of cropmarks is present immediately to the south-west of the site (Fig. 2, 33) and, if this indicates the presence of archaeological features, they may encroach into the site.
- 4.2 The route of a putative Roman road crosses the south-western side of the site, running north-west to south-east (Fig. 2, 6). The presence of this route has not been proven by archaeological excavation and it is not in Margary's survey of Roman Roads in Britain (Margary 1973). The route of the major Roman route, the Fosse Way, runs immediately to the north-west of the site. It is conceivable that Roman activity associated with the route, such as road-side settlement, was present within the site, although there is currently no evidence for this.

4.3 The Skelmire drain is depicted running through the north-east of the site on a source of 1729, evidence of which may survive archaeologically. The sites of several farms and dwellings are depicted on 19th-century sources within the site (Fig. 3). Some of these may have had earlier origins. Some of the hedgerows present around the perimeter of the site have statutory protection under the Hedgerow Regulations 1997 and others may be considered of some cultural heritage interest by the local authority.

4.4 The runways, taxi-ways, areas of hard-standing for planes and a few standing buildings of RAF Swinderby are present on the site, mostly constructed in the 1940s as part of the airfield. Extant structures within the site include the control tower and look-out mound with gun emplacement.

Survival

4.5 The construction of the concrete runways and taxi-ways at the airfield will have adversely impacted upon any archaeological deposits present in these areas, although large parts of the site were unaffected by these works. The surrounding landscape suggests that the area was flat prior to the construction of the airfield, and that no major landscaping works took place. Three of the four sets of cropmarks (Fig. 2, 28-30) visible within the site can be seen on photographs taken after the construction of the airfield. Group 31, however, was seen on an aerial photograph of 1933, and any features they indicated may have been destroyed by the construction of the runway in this area.

4.6 The 19th-century farms and dwellings depicted on the historic maps have now been demolished, although their foundations may survive below current ground level. No evidence of the Skelmire drain is currently visible, but evidence of it may likewise survive below ground.

4.7 The use of areas of the south-west of the site for woodland is likely to have had an adverse impact upon any deposits present there. Excavation of holes to plant the trees and the action of their roots will have caused disturbance. Any features associated with cropmark 33 (Fig. 2) present in this area will have been adversely affected.

4.8 While a few standing buildings relating to the airfield are present within the site, others, which could be seen on aerial photographs, have now been destroyed. Many

of the airfield buildings to the east of Moor Lane have been demolished and so the airfield no longer survives as a complete group of structures.

Importance

- 4.9 There is currently insufficient information to assess the importance of the undated cropmarks present within the site, as they have not been the subject of archaeological investigations.
- 4.10 Should the minor Roman road be present within the site (Fig. 2, 6), it would be of local archaeological importance.
- 4.11 Should evidence of the 19th-century farms and dwellings, and the Skelmire drain survive below current ground level they will be of local archaeological importance. Where hedgerows within the site have statutory protection under the Hedgerow Regulations 1997 or are considered of some cultural heritage importance by the local authority, they are of local importance, due to the frequency of their occurrence.
- 4.12 The airfield structures may have some importance as a group of structures relating to the defence of Britain. However, they do not represent a complete group as many of the buildings to the east of Moor Lane have now been demolished. None of the buildings or structures present on the site are Listed, nor included on North Kesteven District Council's list of sensitive buildings. Hence, they can be considered, at best, of local importance.

5. IMPACT

Ongoing processes

- 5.1 Parts of the south-western area of the site are subject to ongoing disturbance through the action of tree roots, at Bingham's Holt and Kelham's Holt.

Impact of proposed development

- 5.2 The extraction of the sand and gravel deposits within the site will destroy any archaeological features and deposits present above the minerals.

6. MITIGATION

- 6.1 Evaluation through trial trenching or geophysical survey may be necessary in the areas of the site in which cropmarks are visible and their immediate vicinity, and along the route of the putative Roman road, in order to determine the character, extent and survival of any deposits present. Depending on the results of this evaluation, further recording prior to mineral extraction may be required.
- 6.2 It may be necessary for a record to be made of any airfield structures which are to be demolished during the proposed works.

7. PROJECT TEAM

- 7.1 The project was researched and the report produced by Gail Stoten, and illustrated by Lorna Gray. The project was managed by Neil Holbrook.

8. REFERENCES

- Cameron, K 1998 *A dictionary of Lincolnshire place-names*, The English Place-Name Society, Nottingham
- DETR/National Assembly for Wales 2000 *Environmental Impact Assessment: A Guide to Procedures*
- DoE (Department of the Environment) 1986 *List of Buildings of Special Architectural or Historical Interest*
- Field, J. 1989 *English Field Names*
- JSAC (John Samuels Archaeological Consultants) 1998 *Archaeological fieldwalking report on land at the Former RAF Swinderby, Thurlby, Lincolnshire*, JSAC typescript report **236/98/03**
- LAS (Lindsey Archaeological Services) 2004 *Tonge's Farm, Norton Disney Quarry, Norton Disney, Lincs., Archaeological watching brief and excavation*, LAS typescript report **736**

LSMR Lincoln Sites and Monuments Record

Margary, I. D. 1973 *Roman Roads in Britain*, John Baker: London

OAA (Oxford Archaeological Associates) 1994 *Norton Big Wood, Norton Disney, Lincolnshire, Archaeological survey of proposed recharge trench*, OAA typescript report

OAA (Oxford Archaeological Associates) 1994 *Norton Big Wood Extension, Norton Disney, Lincolnshire, Archaeological assessment and site reconnaissance*, OAA typescript report

TPAT (Trent and Peak Archaeological Trust) 1991 *Implications of the proposed duelling of the A46 between Newark and Lincoln*, TPAT typescript report

Cartographic sources

- 1729 Map of Thurlby (LA Misc. Don. 128)
- 1838 Thurlby Tithe Map (LA B 27)
- 1851 Swinderby Tithe Map (LA D 643)
- 1906 Second Edition Ordnance Survey map, 25" series, sheet Lincolnshire 77SE
- 1921 Third Edition Ordnance Survey map, 25" series, sheet Lincolnshire 77SW
- 1973 BGS (British Geological Survey) 1:50,000 geological map, sheet 114: Lincoln
- 2000 Ordnance Survey Explorer 1:25,000 map, sheet 271: Newark-on-Trent

LA: Lincolnshire Archives

Photographic sources

- 08/06/1933 NMR library number not listed
- 16/04/1947 NMR Library number 597
- 25/03/1948 NMR Library number 834
- 24/08/1959 NMR Library number 2114
- 19/06/1968 NMR Library number not listed
- 14/07/1973 NMR Library number 10267
- 01/08/1991 NMR Library number 4709
- 07/07/1997 NMR Library number 12994
- 31/07/2001 NMR Library number 17630

APPENDIX A: GAZETTEER OF RECORDED ARCHAEOLOGICAL SITES

KEY: PH = Prehistoric; Neo = Neolithic; BA = Bronze Age; IA = Iron Age; Rom = Roman; RB = Romano-British; EM = Early Medieval; Med = medieval; PM = post-medieval; MOD = modern.

No.	Description	Period	Status	NGR (all SK)	SMR ref.	Source
1a-1j	Programme of fieldwalking adjacent to the Fosse Way	Rom, Med, PM		8800 6230	LI3155	TPAT 1991
2	Fieldwalking to the east of the site	PM, MOD		8970 6240	LSMR event	JSAC 1998
3	Evaluation and excavation	MOD, Undated		8825 6055	63112	LAS 2004
4	Walkover survey and assessment	PM		8820 6050	Event	OAA 1994, OAA 1999
5	Fosse Way	Rom		Linear		Margary
6	Putative Roman road	Rom		Linear	-	OAA 1994
7	Findspot of Roman coin	Rom		8900 6300	60770	LSMR
8	Swinderby	EM		8680 6300	62448	LSMR
9	Church at Swinderby	Med	GII*	8690 6320	62435	EH
10	Ridge and furrow earthworks	Med		8965 6160	62980	LSMR
11	School building	PM	GII	8695 6325	62460	LSMR
12	Houses	PM	GII	8694 6320	62449	LSMR
13	Vicarage	PM	GII	8683 6323	62447	LSMR
14	House	PM		8684 6307	62445	LSMR
15	Farmhouse	PM	GII	8677 6295	62446	LSMR
16	Farmhouse	PM	GII	8678 6395	62437	LSMR
17	Wesleyan Methodist Chapel	PM		8680 6290	62458	LSMR
18	House	PM	GII	8684 6294	62461	LSMR
19	Blacksmith	PM		8686 6290	62451	LSMR
20	House	PM	GII	8690 6277	62452	LSMR
21	Farmhouse	PM	GII	8686 6274	62448	LSMR
22	House	PM		8690 6268	62440	LSMR
23	House	PM		8690 6265	62449	LSMR
24	Farmhouse/public house	PM	GII	8900 6306	62459	LSMR
25	Farm	PM	GII, GII	8690 6056	62661	LSMR
26	Norton Big Wood	PM	Ancient Woodland	8750 6050	-	
27	RAF Swinderby	MOD	-	8840 6200	62454	LSMR
28	Regular cropmarks of probable modern date	Undated	-	8830 6235	-	AP 31/07/2001
29	Cropmarks of possible enclosures	Undated	-	8810 6200	-	AP 25/03/1948
30	Linear cropmarks	Undated	-	8850	-	AP 19/06/1968

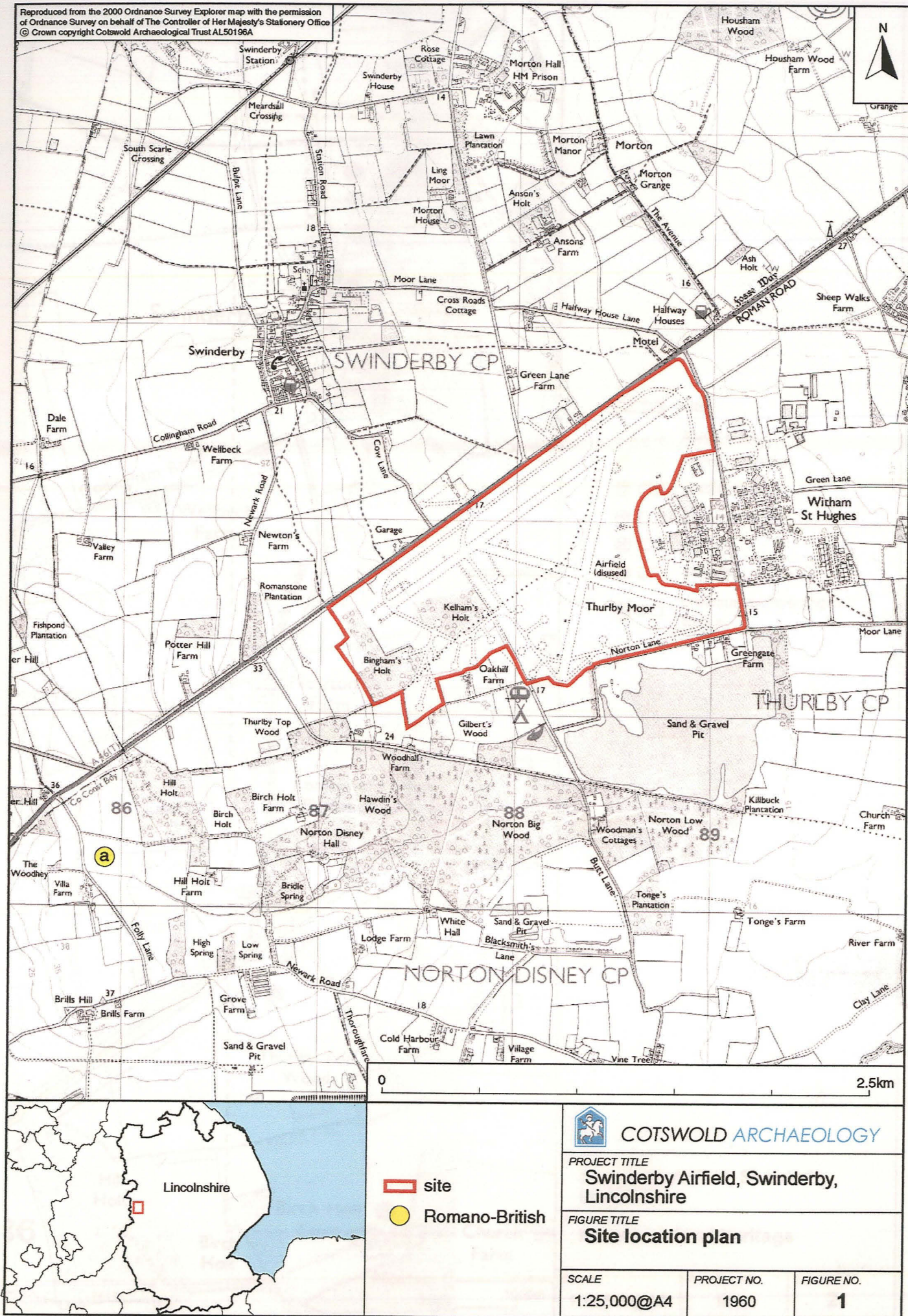
				6185		
31	Cropmarks of possible enclosures and linears	Undated	-	8740 6165	-	AP 08/06/1933
32	Cropmark enclosure	Undated	-	8700 6127	62456	LSMR
33	Cropmarks	Undated	-	8707 6140	-	AP 01/08/1991
34	Cropmark enclosure	Undated	-	8760 6230	62457	LSMR
35	Bank with two flanking ditches	Undated	-	8955 6350	63180	TPAT 1991
36	Bank and ditch	Undated	-	8895 6314	63182	TPAT 1991
37	Stone pillar	Undated	-	8665 6134	62438	LSMR

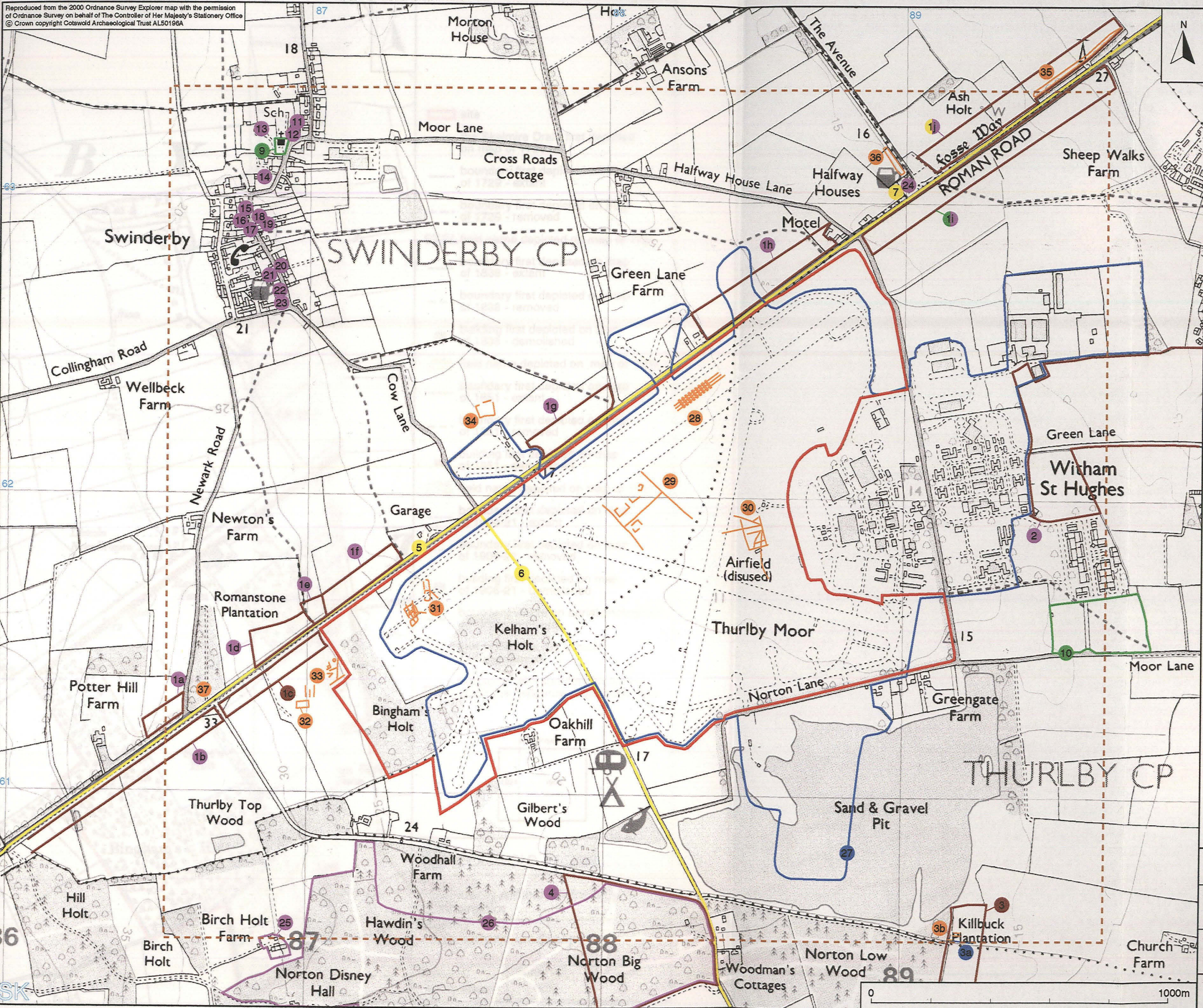
APPENDIX B: EXTRACT FROM THE HEDGEROWS REGULATIONS 1997

Extracted From *Statutory Instruments 1997 No. 1160 The Hedgerows Regulations 1997, Schedule 1: Additional criteria for determining 'Important' hedgerows;*

PART II**CRITERIA****Archaeology and history**

1. The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose "historic" means existing before 1850.
2. The hedgerow incorporates an archaeological feature which is-
 - (a) included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Scheduled Areas Act 1979(g); or
 - (b) recorded at the relevant date in a Sites and Monuments Record.
3. The hedgerow-
 - (a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and
 - (b) is associated with any monument or feature on that site.
4. The hedgerow-
 - (a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Sites and Monuments Record or on a document held at that date at a Record Office; or
 - (b) is visibly related to any building or feature of such an estate or manor.
5. The hedgerow-
 - (a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure acts(a); or
 - (b) is part of, or visibly related to, any building or other feature associated with such a system, and that system-
 - (i) is substantially complete; or
 - (ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act(b), for the purposes of development control within the authority's area, as a key landscape characteristic.





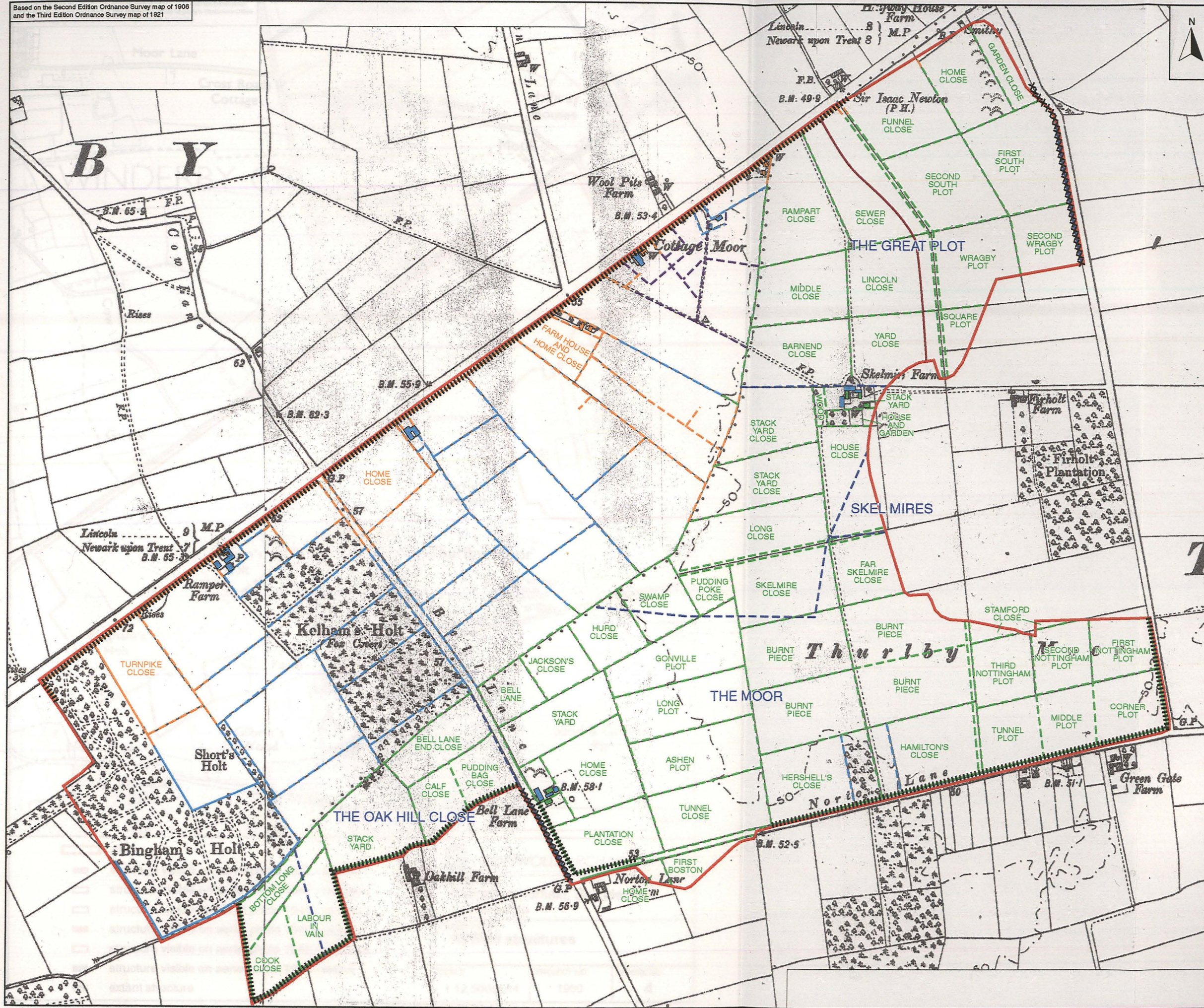
- site
- study area
- Romano-British
- medieval
- post-medieval
- modern
- undated
- previous archaeological works

COTSWOLD ARCHAEOLOGY

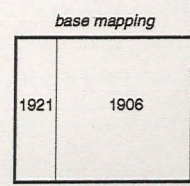
PROJECT TITLE
Swinderby Airfield, Swinderby,
Lincolnshire

FIGURE TITLE
Known cultural heritage

SCALE 1:12,500@A3	PROJECT NO. 1960	FIGURE NO. 2
----------------------	---------------------	-----------------



- site
- the Skelmire Drain first depicted on map of 1729
- boundary first depicted on map of 1729 - extant
- boundary first depicted on map of 1729 - removed
- SKEL field name depicted on map of 1729
- boundary first depicted on map of 1838 - extant
- boundary first depicted on map of 1838 - removed
- building first depicted on map of 1838 - demolished
- YARD CLOSE field name depicted on map of 1838
- boundary first depicted on map of 1851 - extant
- boundary first depicted on map of 1851 - removed
- building first depicted on map of 1851 - demolished
- HOME CLOSE field name depicted on map of 1851
- boundary first depicted on map of 1906-21 - extant
- boundary first depicted on map of 1906-21 - removed
- building first depicted on map of 1906-21 - demolished
- boundary visible on aerial photograph of 1933 - removed
- hedgerow of some cultural heritage interest
- hedgerow with statutory protection under the hedgerow regulations 1997

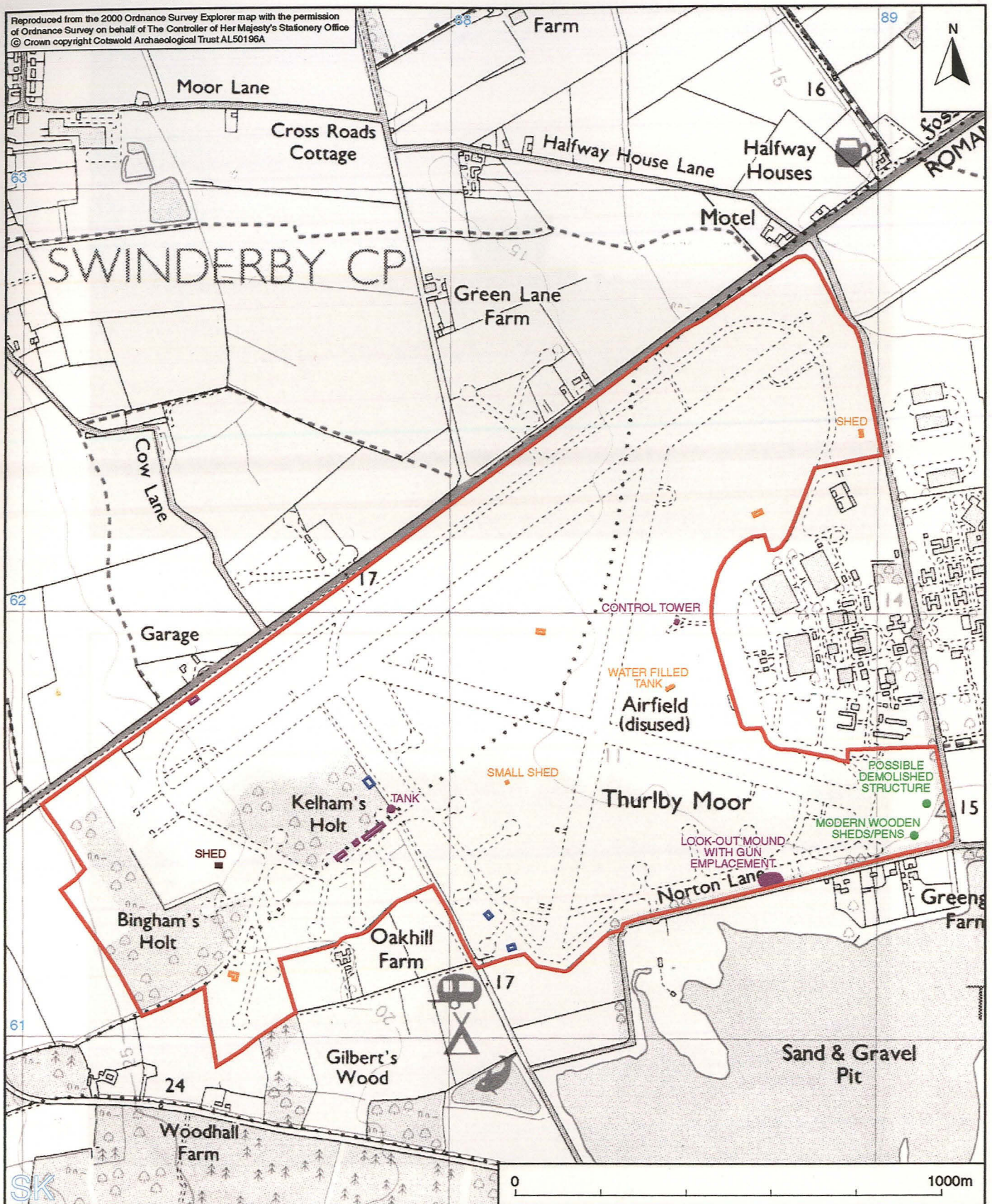


COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Swinderby Airfield, Swinderby,
Lincolnshire

FIGURE TITLE
The historic landscape

SCALE not to scale	PROJECT NO. 1960	FIGURE NO. 3
-----------------------	---------------------	------------------------



- site
- structure visible on aerial photo 1947 - extant
- structure visible on aerial photo 1947 - removed
- structure visible on aerial photo 1948 - removed
- structure visible on aerial photo 1949 - extant
- structure visible on aerial photo 1949 - removed
- structure visible on aerial photo 1973 - extant
- extant structure



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

Swinderby Airfield, Swinderby,
Lincolnshire

FIGURE TITLE

Airfield structures

SCALE

1:12,500@A4

PROJECT NO.

1960

FIGURE NO.

4



5



6

5 The control tower, looking north

6 The look-out mound with gun emplacement, looking south



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

Swinderby Airfield, Swinderby,
Lincolnshire

FIGURE TITLE

Photographs

SCALE

n/a

PROJECT NO.

1960

FIGURE NO.

5 & 6