Northamptonshire County Council

Northamptonshire Archaeology

Archaeological watching brief

at Sywell Runway, Sywell

Northamptonshire

September - October 2007

Anne Foard-Colby

November 2007

Report 07/176

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NORTHAMPTONSHIRE ARCHAEOLOGY

NORTHAMPTONSHIRE COUNTY COUNCIL

NOVEMBER 2007

NGR: SP 8240 6875

ARCHAEOLOGICAL WATCHING BRIEF
AT SYWELL RUNWAY, SYWELL
NORTHAMPTONSHIRE
SEPTEMBER - OCTOBER 2007
REPORT 07/176

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QUALITY CONTROL

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OASIS REPORT FORM

PROJECT DETAILS		
Project title	Archaeological watching brief at Sywell Runway, Sywell, Northamptonshire, September – October 2007	
Short description (250 words maximum)	Northamptonshire Archaeology carried out an archaeological watching brief during the removal of topsoil prior to the infilling of land to the west of runway 5/31 at Sywell Aerodrome, Sywell, Northamptonshire. For the most part any archaeological remains would have been sealed beneath subsoil and therefore not visible during the present work. However, in small areas where the subsoil was shallow a number of exposed features were identified including a Roman oven with associated pitched-stone surface, a ditch and two pits. A small assemblage of 1st to 2nd-century Roman pottery was recovered from the oven and ditch. A small number of residual flint artefacts, and a few sherds of medieval pottery were recovered from the subsoil.	
Project type (e.g. DBA, evaluation etc)	Watching Brief	
Site status (none, NT, SAM etc)	None	
Previous work (SMR numbers etc)	Yes	
Current Land use	Arable	
Future work (yes, no, unknown)	None	
Monument type/period	Roman oven, stone surface, ditch & pits	
Significant finds (artefact type and period)	Roman pottery	
PROJECT LOCATION		
County	Northamptonshire	
Site address (including postcode)	Sywell aerodrome	
Study area (sq.m or ha)	7.45ha	
OS Easting & Northing (use grid sq. letter code)	SP 8240 6875	
Height OD	124m – 127m	
PROJECT CREATORS		
Organisation	Northamptonshire archaeology	
Project brief originator	Sywell Aerodrome	
Project Design originator	Martin Tingle	
Director/Supervisor	Anne Foard-Colby	
Project Manager	Steve Parry	
Sponsor or funding body	Sywell Aerodrome	
PROJECT DATE		
Start date	September 2007	
End date	October 2007	
ARCHIVES	**Location (Accession no.)**	**Content (e.g. pottery, animal bone etc)**
Physical		
Paper		
Digital		
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (NA report)	
Title		
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Contents

Plates

ARCHAEOLOGICAL WATCHING BRIEF

AT SYWELL RUNWAY, SYWELL

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ABSTRACT

Northamptonshire Archaeology carried out an archaeological watching brief during the removal of topsoil prior to the infilling of land to the west of runway 5/31 at Sywell Aerodrome, Sywell, Northamptonshire. For the most part, any archaeological remains would have been sealed beneath subsoil and therefore not visible during the present work. However, in small areas where the subsoil was shallow a number of exposed features were identified including a Roman oven with associated pitched stone surface, a ditch and two pits. A small assemblage of 1st to 2nd-century Roman pottery was recovered from the oven and ditch. A small number of residual flint artefacts and a few sherds of medieval pottery were recovered from the subsoil.

1 INTRODUCTION

An archaeological watching brief was carried out by Northamptonshire Archaeology between September and October 2007 on land to the west of Runway 5/31 at Sywell Aerodrome, Sywell, Northamptonshire (Fig 1; NGR: SP 8240 6875).

The work was undertaken in order to meet the archaeological conditions attached to the planning consent (WP/2007/0252) to level land within an area of 7.45 hectares. The work met the requirements of a Project Design (Tingle 2007) in accordance with a brief issued by Northamptonshire County Council.

The purpose of the works was to identify any evidence for the survival of archaeological features within the development area and to record and characterise any such remains.

2 BACKGROUND

2.1 Archaeology

Aerial photographs taken in the vicinity of the site have revealed linear and circular cropmarks suggesting extensive Iron Age and Roman settlement on ridges located between tributary streams which flow south into the River Nene. Excavations carried out in 1996 to the south of the present development found Iron Age occupation, which appeared to form part of one such line of settlements on high ground overlooking the Billing Brook (Atkins *et al* 2001). However, archaeological evaluation in 2000 failed to

identify previously observed cropmarks situated on the edge of the present development and the observation of topsoil stripping at the end of runway 03 during 2006 only recovered residual worked flint (Tingle 2007).

2.2 Topography and geology

The site lies 4km to the north-east of Northampton and directly to the north of the village of Sywell, between 124m and 127m above Ordnance Datum. It is situated close to the junction of three strata comprising: Northampton Sand with Ironstone; Lower Estuarine Series Pale Sand and Sandstone; and Boulder Clay (BGS1980).

3 METHODOLOGY

All works complied with the requirements of Planning Policy Guidance 16: Archaeology and Planning (DoE 1990) (PPG16). The watching brief was carried out in accordance with current best archaeological practice and the appropriate national and county standards and guidelines including:

- *Management of Archaeological Projects* (English Heritage 1991)
- *Code of Conduct* (Institute of Field Archaeologists 2000)
- *Standard and Guidance for an Archaeological Watching Brief* (Institute of Field Archaeologists 2001)
- *Policy and Guidance for Archaeological Fieldwork Projects in Northamptonshire* (NCCNH 1995)
- Northamptonshire County Council *Health and Safety provisions* and Northamptonshire Archaeology *Health and Safety at Work Guidelines* (2003)

The watching brief took the form of intensive monitoring of topsoil stripping across the route of the haul road and the large area for levelling (Fig 2, front cover and Plate 1). A walkover survey of the stripped areas was undertaken to identify any archaeological features. Excavation was undertaken by a bulldozer with blade, a 360° mechanical excavator with toothless ditching bucket and two dumper trucks.

A general site plan was drawn at a scale of 1:50, with more complex features planned at a scale of 1:20. Standard Northamptonshire Archaeology recording procedures were employed. Contexts were recorded on pro-forma sheets with a unique context number being allocated to each distinct deposit and feature and sections drawn at a scale of 1:10.

Sections were excavated through the ditch and the pit to determine their character and date. Levels were taken on all features and were related to Ordnance Datum.

A photographic record comprising both 35mm monochrome negatives, with associated prints and colour transparencies was maintained, with additional digital photographs.

4 RESULTS OF FIELDWORK

The natural substrate (103) was only observed within the section of a Roman ditch and occasionally elsewhere across the site, where the blade of the mechanical excavator had pulled back the subsoil during particularly wet weather. It consisted of light grey/brown, silty clay with chalk and gravel inclusions.

A number of features, including an oven, pitched-stone surface and part of a ditch situated in close proximity to each other were partly exposed. A stone-edged feature and isolated small pit were also revealed (Figs 2 and 3). The oven and pitched-stone surface were hand cleaned, but not sectioned, so they could be reburied intact.

The remains of the oven (Figs 2 and 3, Plates 2 and 3) were aligned north-east to south-west and cut the natural substrate (103). A foundation trench [109] measured 4.2m long by 2.2m wide. Set within the trench was the stone structure of an oven (107), which consisted of rough ironstone fieldstones, with occasional limestone blocks, laid as two parallel walls, creating a chamber 0.6m wide. Due to heavy truncation by ploughing, the walls only survived to one course in height. The stones in the base of the chamber were pitched, a quantity of them burnt red and obviously re-used; patches of a second layer of stones, lain flat on top of the pitched stones was evident, some of which were also burnt red. Those stones in the half of the chamber closest to the stokehole (north-east end) were burnt red on the inside face. At the south-west end, a short end wall closed the chamber. Light grey silty clay with small chalk and gravel inclusions (108) was used to bond the structure of the oven.

At the north-east end of the oven was the stokehole, outside of which was a patch of grey clay (110) which contained charcoal flecks and small lumps and which was most likely the area where the ashes and charcoal were raked from the stokehole during cleaning. It measured 1.1m wide and 0.7m long, but was not fully exposed (Fig 3, Plate 4). The remains of fill (106) was observed lying directly above the base of the chamber for a length of 1.5m at the north-east end. It was 30mm thick and consisted of dark grey/brown silty clay with frequent small chalk pebbles, moderate gravel and charcoal and contained a sherd of Roman pottery and a residual flint flake.

Three metres to the north of the oven was a pitched-stone surface (114), which consisted of rough fieldstones of ironstone, approximately 0.3m by 0.3m in size. These were laid at a forty-five degree angle over an area 2.3m wide and more than 5m long, with the western edge too deep under the subsoil to establish a limit (Fig 2, Plate 5). The stones appeared to have been set into a layer of dark grey brown silty clay with some small gravel and chalk inclusions, charcoal lumps and flecks (115). Overlying the surface were patches of mid grey, silty clay with charcoal lumps and flecks (113).

Ditch [105] lay 5m to the south of the oven on an east – west alignment. It was 'U'-shaped in profile, 0.87m wide and 0.3m deep (Fig 4, section 1, Plate 6). The fill (104) consisted of firm, dark blue/black silty clay with gravel and chalk pebbles and very frequent charcoal lumps. Roman pottery sherds were recovered from the fill. The dark, rich fill represents the probable deposits from successive cleaning out of the stokehole of the oven.

A rough crescent-shape of undressed ironstone fragments (116), to the east of the pitched-stone surface, measuring 1.5m in diameter by 0.25m – 0.3m high, in two courses, probably represents the truncated remains of a small circular stone structure. The stones enclosed a fill (117), which consisted of light to medium yellow/brown silty clay with occasional small gravel (Fig 2, Plate 7). No finds were present.

A small, isolated pit lay 90m to the south-east of the oven [112]. It was circular in plan, with steep sides and a flat base and measured 0.75m in diameter by 0.2m deep. Its fill (111) consisted of mid grey/brown silty clay with some rounded gravel with chalk pebbles and charcoal flecks and lumps (Fig 2, Plate 8). No finds were present.

The subsoil (102) sealed all the features and was 0.1m - 0.12m thick; residual Roman, medieval and post-medieval pottery sherds, together with a few flint flakes were recovered. The topsoil was 0.25m – 0.4m thick.

5 THE FINDS

5.1 **The flint** by Andy Chapman

A total of nine flints were retained. These include a large flake with a thermal fracture, from context (106), the fill from the interior of the oven, and a heavily patinated chunk from subsoil (102).

The other seven pieces, six from subsoil (102) and one from fill (104) of ditch [105], comprise a range of small to large irregular flakes, all in a brown to grey vitreous flint

with many still having areas of white to cream cortex surviving. A couple of squat irregular flakes have miscellaneous edge retouch and the flake from fill (104) is edge damaged, possibly from utilisation. The only diagnostic piece is a large and crudely made discoidal scraper, 40mm diameter by up to 15mm thick. This can be dated to the early Bronze Age, and the squat irregular nature of the other material would also be consistent with this date, or even casual usage of struck flint within the Iron Age.

5.2 **The pottery** by Tora Hylton

The watching brief produced a small group of pottery dating from the Roman, medieval and post-medieval periods (Table 1). A total of 77 sherds with a combined weight of 0.971kg was recovered from five individual deposits. The assemblage is dominated by Roman pottery (93% by weight) dating from the mid-late 1st to 2nd centuries. Fifty-eight sherds of Roman pottery were located in stratified deposits; the majority (53) were recovered from fill (104) of ditch [105], while much smaller abraded groups were associated with the oven, fill (106) and layer (113), which partially covered the stone surface (114). With the exception of one sherd of Samian, the entire assemblage comprises locally manufactured domestic wares in coarseware fabrics. Hard-fired grog-tempered wares are dominant and diagnostic forms include channel rim jars and a necked jar with everted rim. There are few diagnostic forms in the other fabrics represented; those worthy of note include a shell-gritted jar with lid-seating and a necked jar in a sand-tempered fabric. There are no diagnostic sherds of greyware.

Imported wares are represented by one sherd of Samian recovered from the subsoil. The sherd is highly abraded and much of the exterior slip is lost, it comes from a Dragendorf Type 32 dish with curving sides and a footring. This form dates to the late 2nd century (Webster 1996, 44).

Finally there are three sherds of medieval pottery dating to the 14th/15th centuries and five sherds of post-medieval pottery dating to the 19th and 20th centuries, all display signs of abrasion and were recovered from subsoil deposits (102).

General Comments

Pottery recovered from stratified deposits dates to the mid-late 1st to 2nd century. Any later material was recovered from subsoil deposits.

Table 1: Pottery by context and type

Fabric Type	**Context Number**									
	102		104		106		110		113	
	No/Wg(g)		No/Wg(g)		No/Wg(g)		No/Wg(g)		No/Wg(g)	
Roman pottery										
Grog tempered wares (hard)			28	666	1	9				
Grog tempered wares (soft)									1	9
Greyware	6	35	19	119			3	11	2	4
Sand tempered ware			5	33					1	1
Samian	1	10								
Shell-gritted ware	1	22	3	11						
Medieval pottery	3	36								
Post-medieval pottery	5	30								
Total	16	133	53	804	1	9	3	11	4	14

5.3 **Ceramic building material** by Pat Chapman

Ceramic tile

There are five tile sherds weighing 748g. One from fill (110) of the stokehole of the oven and four others come from subsoil (102).

The sherd from layer (110) at the stokehole end of the oven is a fragment of Roman *imbrex* roof tile. It is 18mm thick and made from a slightly soft fine vesicular clay with occasional large subrounded grit up to 7mm and more frequent inclusions up to 1mm, and fired to brown with a large black core.

Three of the four sherds from subsoil (102) comprise one sherd 14mm thick in a sandy hard orange fabric, and two in a red brown fabric with creamy streaks and grey core, one is 14mm thick with a white slip surface and mortar remnants, the other is 8mm thick with the ridged edge 15mm thick. The other sherd is a possible decorative wall tile in a hard slightly coarse pink fabric covered in a dark buff slip. It is 100mm long with a 'centre' 30mm wide rising about 30° from one end with almost vertical knife-cut sides, but the top and top edges as well as the sides have been lost. These tiles are probably medieval in date, although the decorative tile is most likely post-medieval.

Fired clay

There are 42 fragments of fired clay, weighing 306g, from fill (104) of ditch [105]. They are virtually all made from a soft slightly silty fabric fired to pale brown and pale red brown, only two are dark red. There are no particular surfaces or features such as wattle impressions and they have not been subject to great heat. These are unremarkable debris.

6 ENVIRONMENTAL EVIDENCE

6.1 **The animal bone** by Karen Deighton

Twenty grams of burnt bone were recovered from fill (104) of ditch [105] during the course of dry sieving following flotation. Unfortunately, due to poor preservation none of this material could be identified to species.

6.2 Charcoal

Charcoal pieces with a total weight of 35g were recovered from fill (104) of ditch [105] and layer (110) from near the stokehole of the oven, and retained for archive.

6.3 **The seeds** by Karen Deighton

Introduction

Two samples were hand collected from the excavation, one from fill (104) of ditch [105] and the other from layer (110) from near the stokehole of the oven. Assessment was undertaken to establish the nature, preservation and presence of ecofacts and their potential contribution to the understanding of the function and economy of the site. Any significance to local and regional archaeology was also considered.

Method

The samples were processed using a siraf tank fitted with a 500-micron mesh and flot sieve. The resulting flots were air-dried and analysed using a microscope (10xmagnification). Preliminary identifications were made using the author's reference collection, a seed atlas (Schoch *et al* 1988) and websites at www.oardc.ohio-state.edu and asis.scri.ac.uk. Residues were air-dried, sieved and sorted for artefacts and ecofacts.

Results

Preservation was by charring only. The condition of the artefacts was overall poor with high levels of fragmentation and abrasion, which affected identification. Only two cereal grains and one chaff fragment could be identified to species with any certainty.

Species present

Table 2: Finds by sample and context

Sample	**1**	**2**
[Cut]/(fill)	[105]/(104)	(110)
Feature type	Ditch	Layer near stokehole
Volume(litres)	20	20
Charcoal	Present	Frequent
Cereal grain	54	
Chaff	2	
pulse	1	1
Wild/weed	13	

No artefacts were recovered from the sieved residues.

Discussion

The cereal types noted (spelt (*T.spelta*), hulled barley (*H.vulgare*), oat (*Avena sp*)) are those expected for this period, although the small quantity precludes any assessment of evidence for crop ratios. The scarcity of chaff could suggest the earlier stages of crop processing (eg threshing and winnowing) were taking place elsewhere, with grain brought to the site for storage, consumption or further preparation related to either of these. However, this statement is tentative due to the small amount of data.

Only seeds belonging to the dock family (Rumex sp) could be identified to taxon for the wild taxa present. Members of this family are often weeds of cultivation or of other disturbed ground.

The proximity of the samples to an oven would suggest an activity associated with it.

7 DISCUSSION

An oven, a pitched-stone surface, a short length of ditch, a stone-edged feature and an isolated pit were revealed during the topsoil stripping for levelling. The oven and ditch both produced Roman pottery from the mid to late1st – 2nd century. The oven and stone-surface were built using similar pitched-stone construction suggesting a contemporary use. The stone surface may have provided a dry working surface adjacent to the oven or perhaps was the base of a small shed, which kept dry the faggots or wood needed to fire the oven. The purpose of the oven is uncertain as only part of it survives, but it could have been used to dry or malt grain.

These features were clustered towards the centre of the present field and it is likely that further settlement remains are preserved below the subsoil. If so, this settlement may be part of a farmstead and therefore extends the series of Iron Age and Roman occupation previously noted further to the north.

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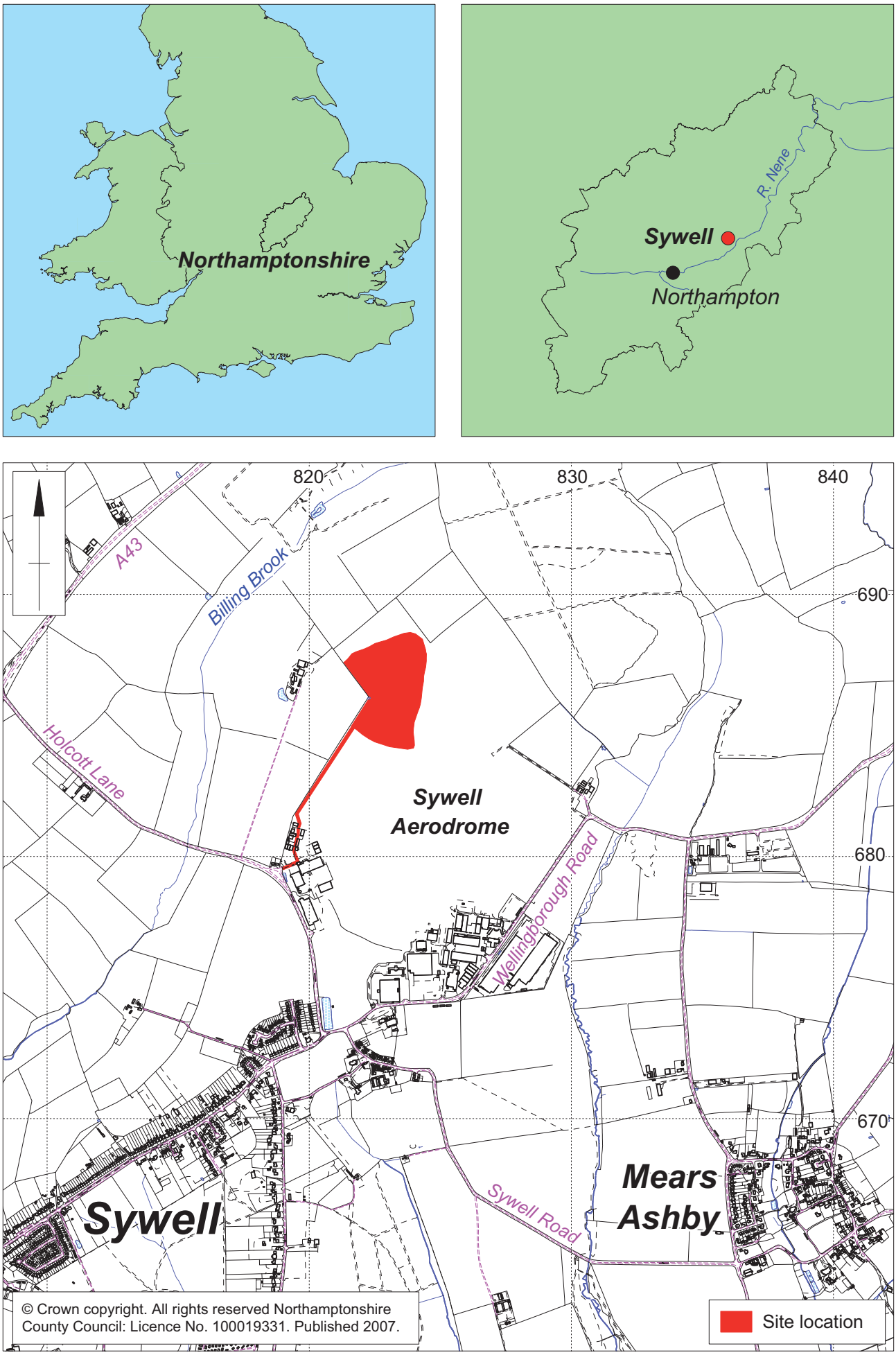
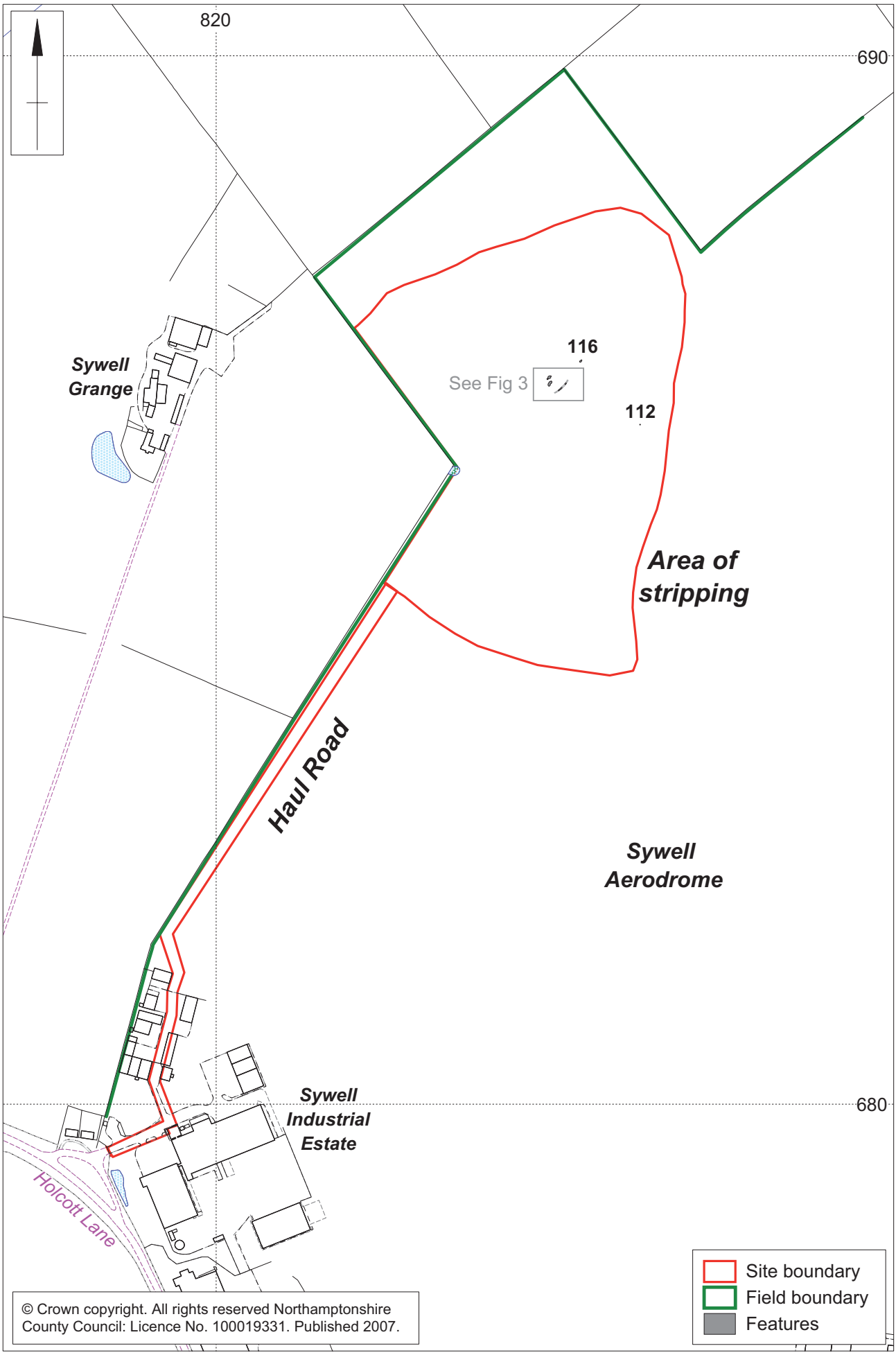


Scale 1:20,000

Site location Fig 1



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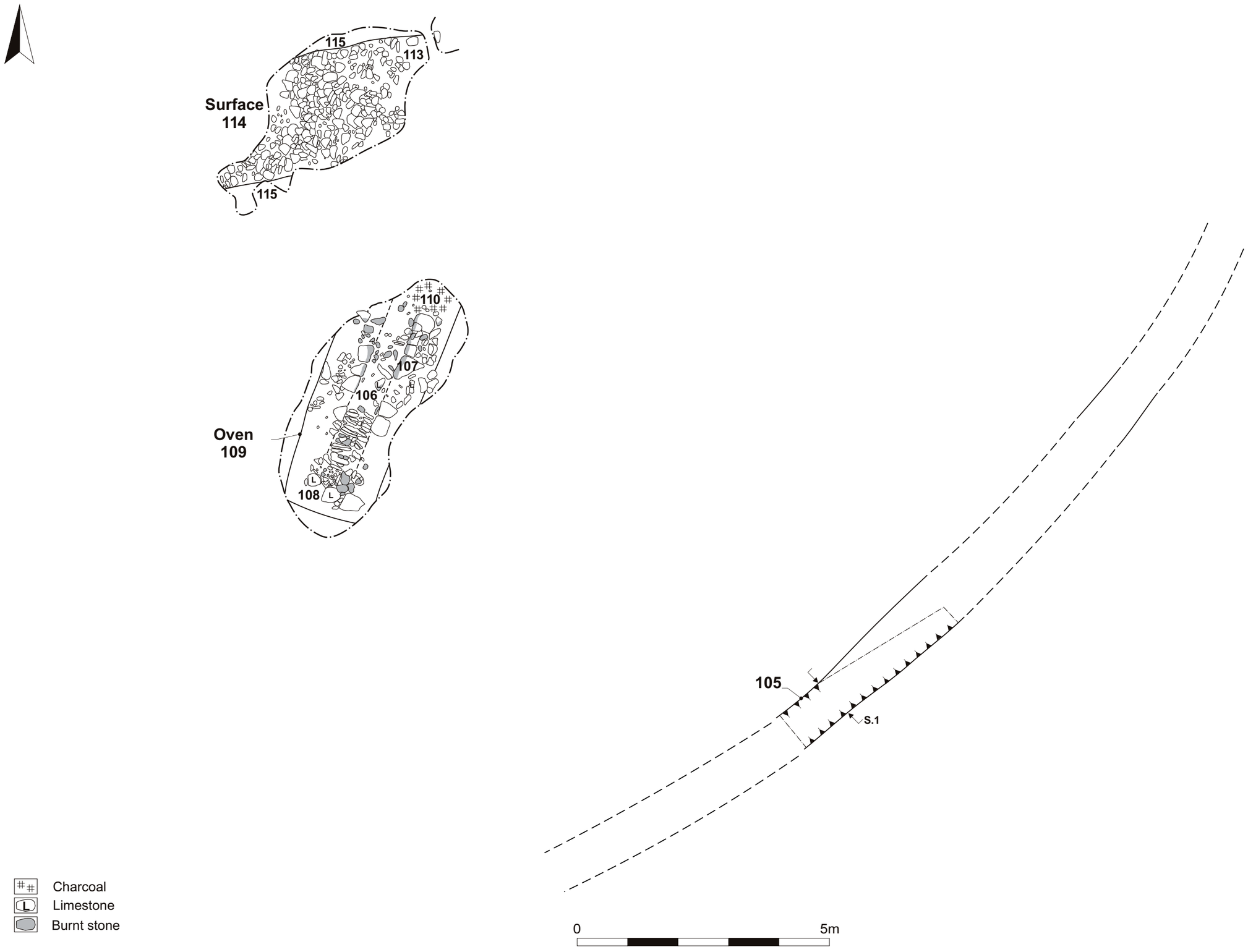
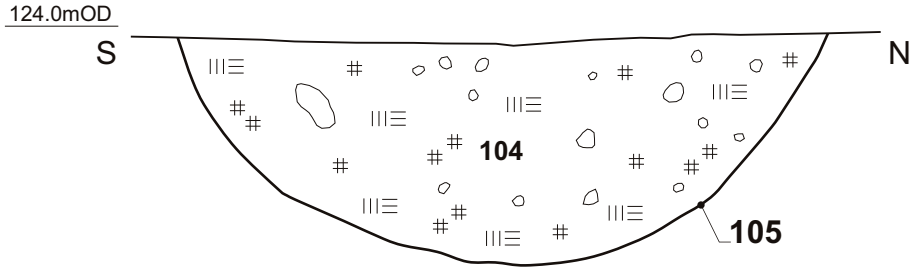
Excavated features Fig 2



Plan of features Fig 3

Section 1



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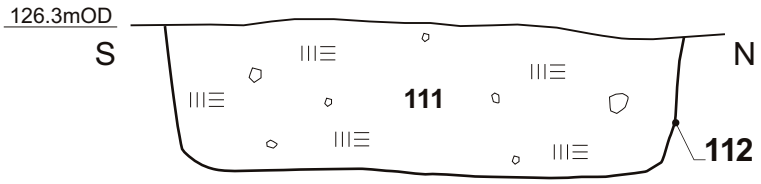

Sections 1 and 2 Fig 4

Plate 1: General view of the site at the start of topsoil stripping, looking south-west

Plate 2: General view of oven [109] with stokehole to the north-east, looking south

Plate 3: Oven [109], parallel stone walls of drying chamber and stokehole (top), looking north-east

Plate 4: Oven [109], stokehole end, looking south-east

Plate 5: Pitched-stone surface (114), looking north-west

Plate 6: Ditch [105], looking south-west

Plate 7: Part of stone structure (116), looking east

Plate 8: Isolated pit [112], looking north-west