



Northamptonshire Archaeology

Archaeological Earthwork Survey at Clack Hill Little Bowden, Market Harborough, Leicestershire



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QUALITY CONTROL

	Print name	Signed	Date
Checked by	Pat Chapman		
Verified by	Adam Yates		
Approved by	Andy Chapman		

OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological earthwork survey at Clack Hill, Market Harborough, Leicestershire	
Short description	Northamptonshire Archaeology was commissioned by CgMs Consulting Ltd to undertake a measured earthwork survey on 7ha of land at Clack Hill, Market Harborough, Leicestershire. The survey identified and recorded well preserved earthworks relating to the medieval open field system. Later activity was represented by a post-medieval extraction pit.	
Project type	Earthwork Survey	
Site status	None	
Previous work	Desk-based assessment (Dawson 2007); Geophysical survey (Butler 2009)	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	Earthworks relating to open field system (ridge and furrow, headlands, droveway and post-medieval extraction	
Significant finds	-	
PROJECT LOCATION		
County	Leicestershire	
Site address	Clack Hill, Kettering Road, Little Bowden, Market Harborough	
Study area	7ha	
OS Easting & Northing	475100 286900	
Height OD	125m	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	None	
Project Design originator	NA	
Director/Supervisor	Carol Simmonds (NA)	
Project Manager	Adam Yates (NA), Mike Dawson (CgMs Consulting Ltd)	
Sponsor or funding body	CgMs Consulting Ltd	
PROJECT DATE		
Start date	October 2010	
End date	November 2011	
ARCHIVES	Location	Content
Physical	X.A168.2011	N/A
Paper		1 archive box of site records,
Digital		1 CD dxf data, digital photographs, report
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (NA report)	
Title		
Serial title & volume	NA report 11/256	
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**ARCHAEOLOGICAL EARTHWORK SURVEY AT
CLACK HILL, MARKET HARBOROUGH
LEICESTERSHIRE
OCTOBER 2011**

Abstract

Northamptonshire Archaeology was commissioned by CgMs Consulting to undertake a measured earthwork survey on 7ha of land at Clack Hill, Market Harborough, Leicestershire. The survey identified and recorded well preserved earthworks relating to the medieval open field system. Later activity was represented by a post-medieval extraction pit.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by CgMs Consulting to undertake a measured earthwork survey of 7ha of land at Clack Hill, Market Harborough, Leicestershire (centred on NGR 475100 286900; Fig 1). This work follows a desk-based assessment (Dawson 2007) and a geophysical survey (Butler 2009) across the survey area.

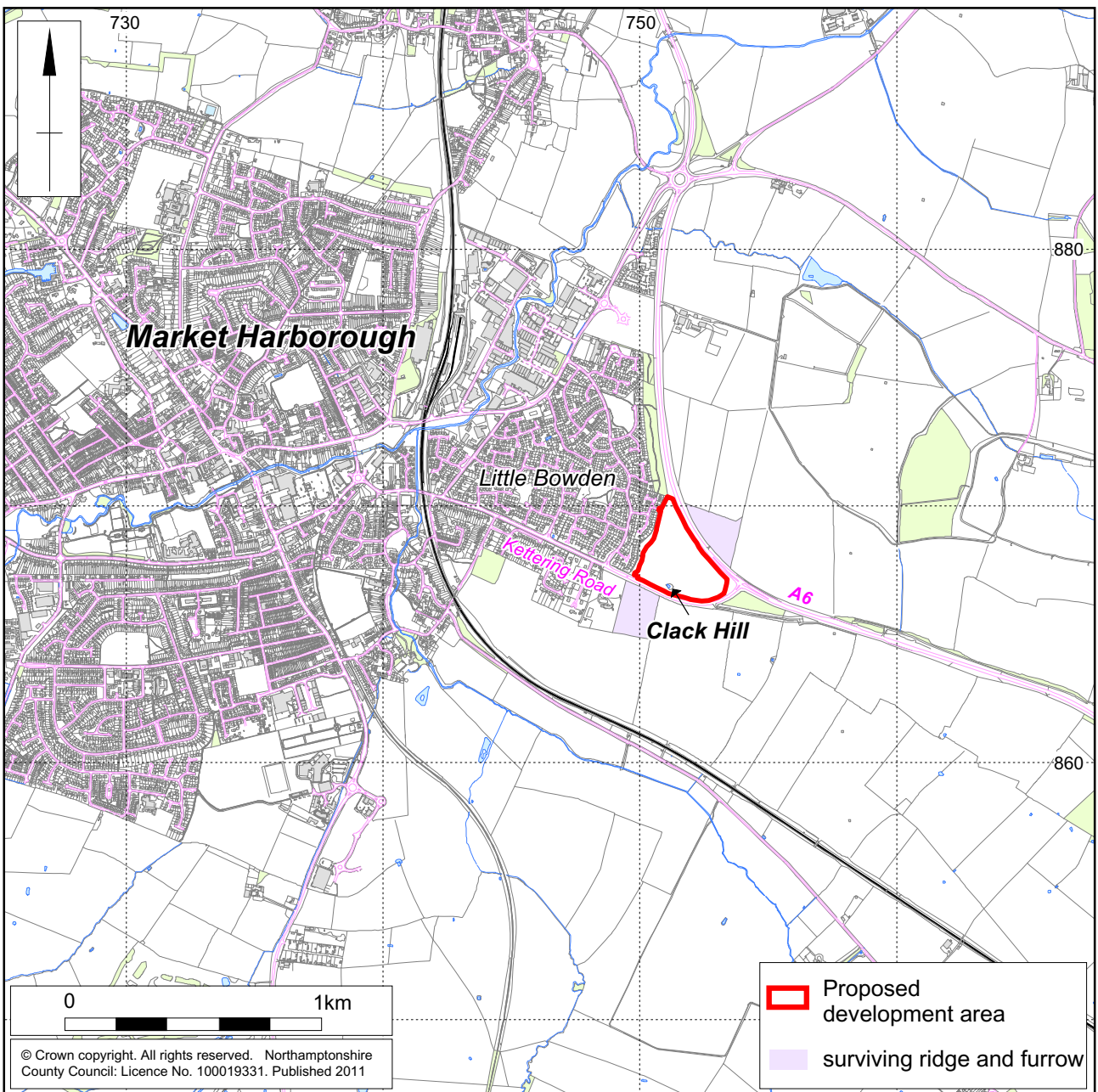
The work is being undertaken following the results of an appeal of the refusal of a planning application (APP/F2415/A/10/2134085). The application area contains medieval earthworks comprising a droveway and remnants of open field cultivation, and as such planning permission was not to be considered until the applicant was able to indicate the potential impact of the proposed works. In order to do this, a measured survey of the earthworks was required.

2 BACKGROUND

2.1 Topography and geology

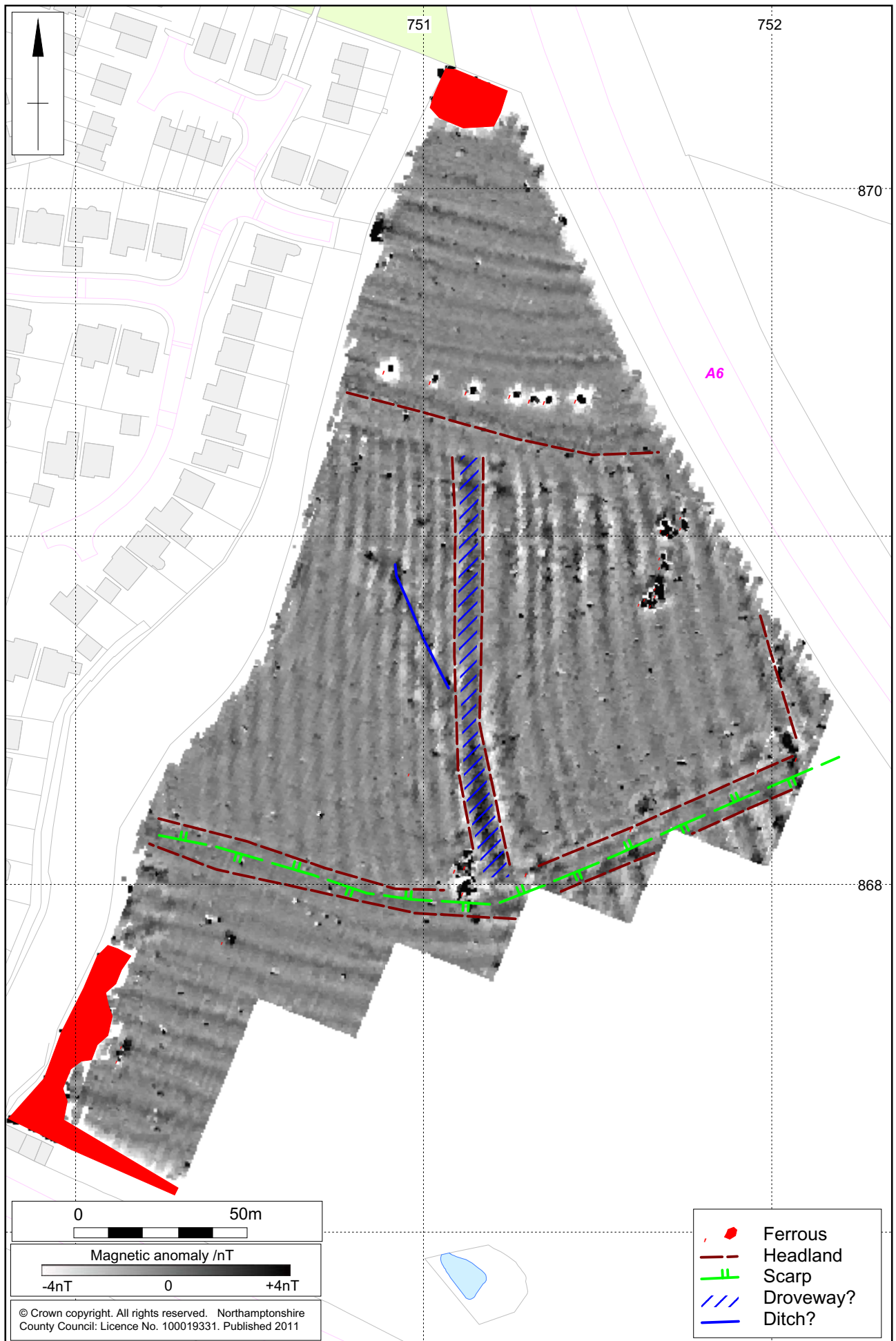
Clack Hill is situated on the eastern edge of Little Bowden village, Market Harborough in South Leicestershire. The investigation site covers a triangular-shaped area of land between Kettering Road to the south and the A6 road in the north-east (Fig 1). To the west, the site is bounded by a sharp drop overlooking modern housing. A public right of way crosses the site from the south-western corner to a point in the northern boundary.

The site itself lies at approximately 131m aOD to the east and slopes steeply down to an elevation of 105m aOD in the north-western corner. The geology of the area is believed to be Upper Lias clays (BGS Sheet 170 Market Harborough).



Scale 1:25,000

Site location Fig 1



1:1,500

Detailed magnetometer survey interpretation Fig 2

2.2 Archaeological background

Clack Hill would appear to have been within the open fields of Little Bowden during the medieval and post-medieval periods (Dawson 2007). In its existing form the surviving remnants of the open field system lie on Clack Hill, and a field to the south of Kettering Road and to the north of the A6 trunk road (Fig 1). The map accompanying the Inclosure award of 1780 illustrated the extent of open field cultivation prior to parliamentary enclosure (Dawson 2007, fig 3). It suggests that Clack Hill lay in four furlongs; they were, from north to south, Stockwell Furlong, Flax Furlong, Clack Hill Leys and another furlong where the name is not visible on the map extract.

Between 1780 and 1880 a clay pit was excavated to provide clay for the brickworks at the foot of the Kettering Road.

Previous archaeological works included the production of a desk-based assessment (Dawson 2007). This noted that the surviving ridge and furrow earthworks were well defined. Subsequent to this a geophysical survey of 3ha of the field (the north-western half), was undertaken (Butler 2009). This emphasized the survival of three alignments of ridge and furrow with headlands, a possible droveway and a curving ditch (Fig 2).

3 AIMS AND METHODOLOGY

The principal objective of the works was to provide an archaeological exploratory investigation.

The specific aim was to determine, record and understand the nature, extent, function, and character of the archaeological earthwork remains on site.

In addition the project had the potential to contribute to wider research aims, particularly those set out in Cooper (2006). Of particular relevance are those aims related to medieval rural settlement (Lewis 2006, 190-194). This includes the following theme: origins of the open field system and its relationship to settlement.

The works were carried out in accordance with the IfA Code of Conduct (2010), the *Standards for Field Evaluation* (IfA 2008) and English Heritage guidelines (EH 2007).

3.1 Fieldwork and processing

The survey encompassed 7ha of ground on Clack Hill. Works were undertaken in October 2011; surveying conditions were very good over the survey zone.

A measured survey of earthworks, natural slopes and the bases and extent of tree canopy was undertaken by means of electronic instruments. They included a Leica 1200 Global Positioning System (GPS) to a 3D accuracy of +/- 0.05m (using SMARTNET real-time corrections). The features were surveyed relative to Ordnance Survey National Grid; levels were related to Ordnance Survey datum. The tops of the ridges and bases of the furrows were surveyed, alongside the tops and bottoms of slopes (for headlands, droveways and extraction pits) in order to generate a series of line and/or hachure plans. These were supplemented by a series of profiles.

GPS survey data was processed through Leica GeoOffice 8.1 and exported via AutoCAD into MapInfo.

General photographs of the survey area and surveyed features were taken from a variety of directions using a digital camera. A record of photographs taken was entered on a cross-referenced index sheet.

3.2 Reporting and archive

Digital and hard copy versions of the report will be made available to CgMs Consulting. The report includes the survey data digitised into MapInfo V8 and the features represented as lines of varying weights and types (EH 2007). This data will be exported to a dxf format to be imported into other GIS packages.

The Leicestershire and Rutland museum accession code is X.A168.2011.

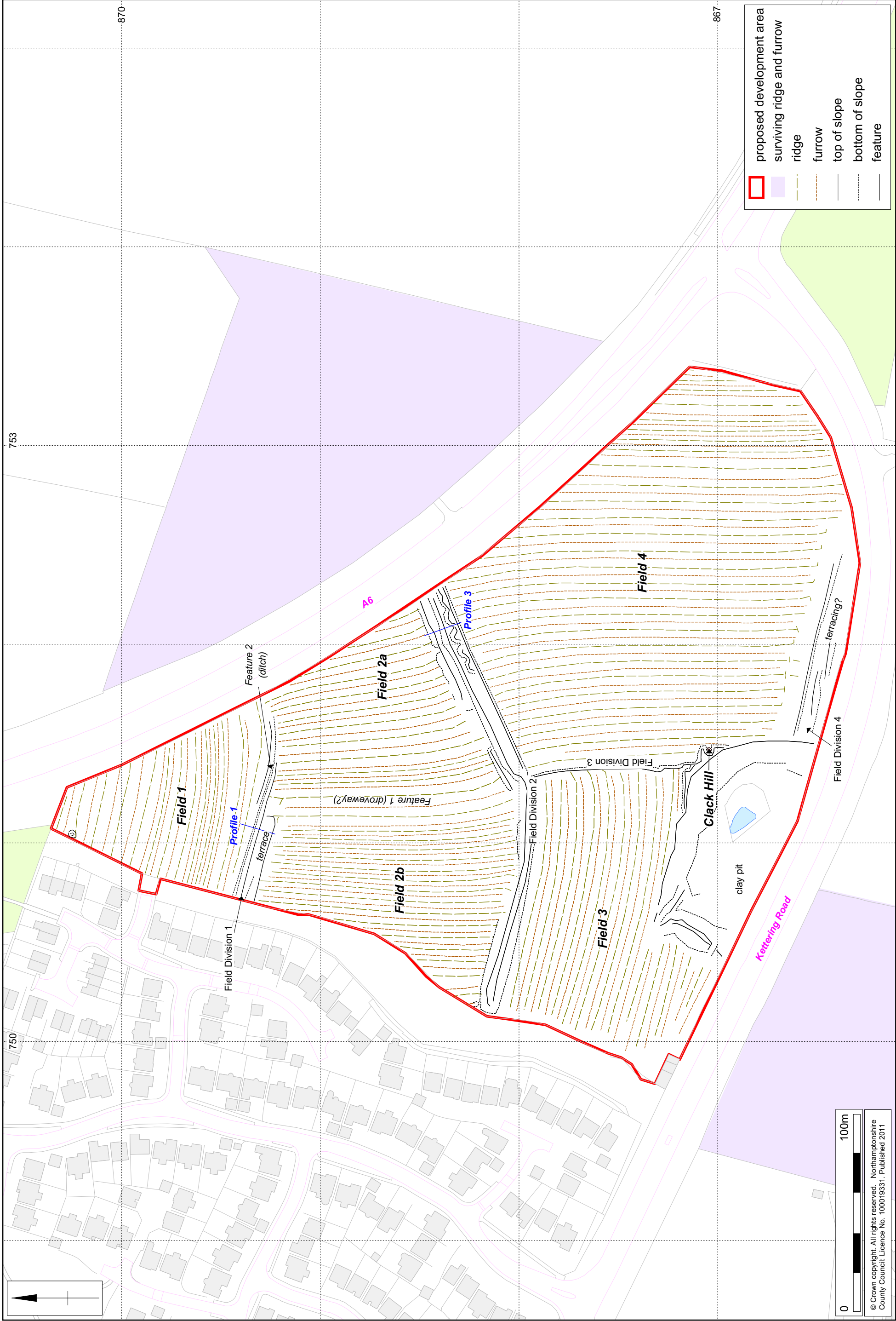
4 THE SURVEY RESULTS

In general, the surveying conditions for all open grass areas were good with generally good surface visibility.

The survey identified earthworks which are remnants of the medieval ridge and furrow field cultivation (section 4.1; Figs 2, 3 & 4) and associated field divisions including headlands (section 4.2). A clay extraction pit (section 4.3) was also recorded. All earthworks are well defined and well preserved with only small areas of trampling caused by livestock. The disturbance was situated around the gates or water/feeding troughs. There is also an Ordnance Survey trig point (bench mark) on the summit of Clack Hill (see front cover). The point is marked by a concrete pillar (Trig Point 2191, S4852).



General view of the ridge and furrow across Fields 2(b) and 1, looking north Fig 3



4.1 Medieval cultivation

The medieval open field cultivation had been divided into four furlongs or fields (Fields 1-4; Fig 4) by headlands, terracing or ditch features (section 4.2).

Field 1

Field 1 is located in the northern part of the survey area and covers approximately 0.62ha (Figs 4 & 5). From the survey it is difficult to ascertain the full extent of the field but it appears that the strips have a slight S-shape in plan. The strips, aligned west north-west to east south-east measure up to 90m long. The ridges are broadly spaced to the north at 12m apart, but tighten to 5m apart nearer to *Headland 1*. The ridges are between 3m and 5m wide and are up to 0.50m high. They have gradual breaks of slope and even sides.



General view of the profile of the strips in Field 1, looking east Fig 5

Field 2

Field 2 is south of Field 1, separated from it by Field Division 1. It covers approximately 1.67ha (Fig 4) and comprises two sets of strips (Field 2a and Field 2b), with an S-shaped curve separated by two ridges, (Feature 1) which are more pronounced and broad than the other strips. The strips in Field 2b are aligned south to north and measure up to 112m long. The ridges forming Feature 1 are 11m apart and measure 5m wide by 0.60m high. Feature 1 corresponds with the putative droveway recorded in the geophysical survey.

To the east of this feature the strips in Field 2a are broadly spaced at 7m apart, 4m wide and 0.30m high, whereas to the west (Field 2b) the strips are 5.50m apart, 2.50m wide and 0.40m high (Fig 6). They have gradual breaks of slope and even sides.



General view of the strips in Field 2b, looking north-west Fig 6

Field 3

Field 3 is in the western part of the survey area and covers approximately 1ha (Figs 4 & 7). The S-shaped strips, curving from the north-west to south-east, measure up to 122m long. The ridges are broadly spaced to the north at 7.50m apart and average 3m wide and up to 0.50m high. They have gradual breaks of slope and even sides.



General view of the profile of the strips in Field 3, looking east Fig 7

The south-eastern corner has been disturbed by the clay pit and also by the hollow excavated for the trig point monument (Fig 4).

Field 4

Field 4 is in the eastern part of the survey area and covers approximately 2.75ha (Figs 4 & 8). The strips, aligned north to south, measure up to 189m long and have a slight S-shape, with clearly defined plough turns at the southern end of the furrows.

The ridges are broadly spaced at 9m apart, with the exception of four strips in the eastern part of the field which are narrower at 5m apart. The ridges average 4m wide and are up to 0.50m high and have gradual breaks of slope and even sides.



General view of the strips in Field 4, looking north-east Fig 8

4.2 Field Divisions**Field Division 1**

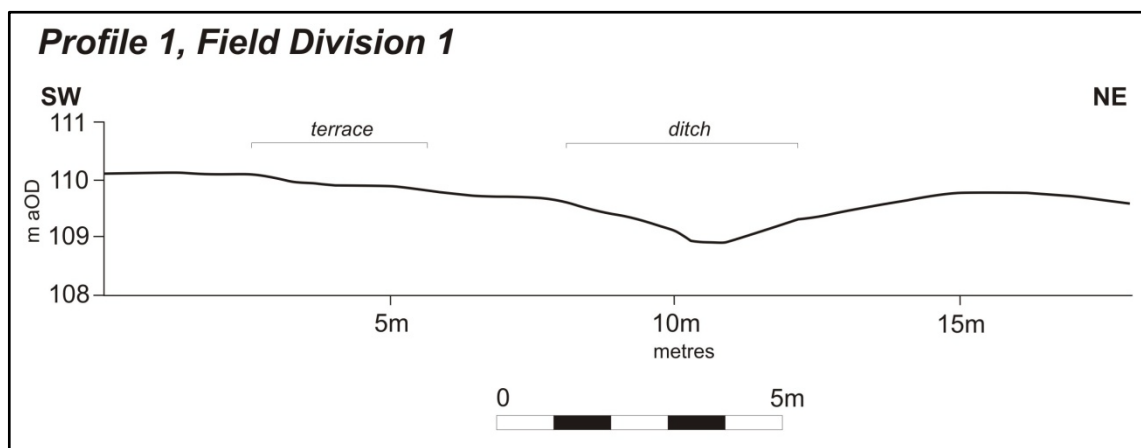
Division 1 (Figs 4 & 9) has two elements, comprising the turn of the plough and terracing, forming the northern end of Field 2b, and what may be a later ditch feature (Feature 2) defining the northern extent of Fields 2a and 2b. The plough turn element is clear at the northern terminal end of Feature 1; however, there is no evidence of plough turning before the top of the slope of the terracing.

The division is aligned north-west to south-east, and in total measures 97m long and 12m wide. The plough turn and terracing (Fig 10) is situated to the north-western end of the feature. It is a total of 44m long, 4m wide and up to 0.20m high, with very gradual breaks of slope down to an even plateau.

The ditch, to the north-east, measures 97m long, 5m wide and up to 0.70m deep, a well defined bowl-shaped profile with a narrow base and gradual sloping sides. Although well defined to the west, at the eastern end it peters out to a very ephemeral terminal.



General view of Field Division 1, with the ditch in the centre, looking east Fig 9



Profile 1, Field Division 1, Scale 1:125 Fig 10

Field Division 2

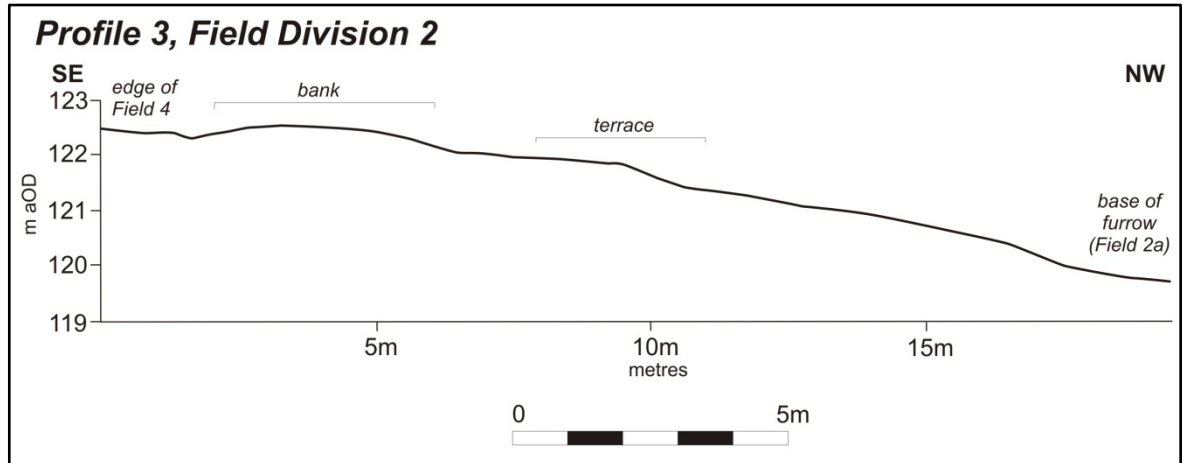
Field Division 2 (Figs 4 & 11) comprises a well defined earthwork bank defining the boundary between Fields 2b and Field 3 and also between Field 2a and Field 4. It is aligned north-west to south-east, and turns to the north-east at the junction with Field Divisions 1 and 3. It is 226m long, has a maximum width of 12m and is up to 2.5m high.

The western end comprises a shallow southern slope up to 0.30m high and a steeper north facing slope up to 0.60m. In places the ridges of Field 2b have mounded up against the slope suggesting that an earthwork or slight scarp may predate the ploughing.



General view of Field Division 2, looking south-west Fig 11

As the earthwork curves round to the north-east a second, lower terrace is visible on the north-facing side. At the north-eastern end, the top of the main earthwork bank has a number of scalloped-shaped mounds (Fig 4). Here, the terrace comprises a flattish piece of ground, 3m wide, with its north-western edge defined by a sharp break of slope. The ridges of Field 2a mound up against the north-western face of the slope (Figs 11 & 12).



Profile 3, Field Division 2, Scale 1:125 Fig 12

Field Division 3

Field Division 3 (Fig 4) comprises a well defined earthwork slope separating Field 3 from Field 4, aligned north to south, 83m long, 2m wide and 0.30m high. The slope has gradual breaks of slope and even sloping edges. Its southern end has been cut away by the clay pit.

Field Division 4

Field Division 4 (Figs 4 & 13) defines the southern extent of Field 4 and comprises the plough turn (headland) and three parallel shallow terraced slopes. It is aligned north-west to south-east, 92m long and 22m wide.



General view of Field Division 4 (terracing), looking south-east Fig 13

Between the ridge and furrow and the terracing is a strip of flattish ground, which is 10m wide. The northern terrace is 92m long, 1.50m wide and up to 0.40m high. The middle terrace is at least 30m long, 3.70m wide and up to 0.40m high; and the southern terrace at least 18m long 2.80m wide and also up to 0.40m high.

4.3 The clay extraction pit

Adjacent to Kettering Road is a substantial and well defined extraction pit measuring 113m long (east to west), 55m wide and up to 5m deep (Figs 4 & 14). The flattish base of the pit has a watering hole in the centre. The northern and eastern edges of the pit face comprise steep, sloping sides whilst the western edge is more gradual.



General view of the clay pit, looking west Fig 14

Part of the northern edge and the western edge is defined by upcast earth. A earthwork ramp leading into the clay pit is situated in the north-western corner of the pit.

5 DISCUSSION

The methodology employed has been successful in meeting the aims of the survey. The use of GPS has allowed for a rapid and systematic assessment of the extent, nature and survival of the resource.

The survey has succeeded in identifying well-preserved remains associated with the open field system of Little Bowden and later exploitation of the clay. Although the location and extent of the remains has been accurately mapped and basic descriptions produced, interpretation and understanding remain extremely limited, especially with regards the earlier features recorded in the geophysical survey (Butler 2009).

The height of the surviving remnants of the open field system indicates that cultivation in the Clack Hill area had occurred over a long time frame. The desk-based assessment suggests that the area had been under cultivation from the 10th or 11th centuries (Dawson 2007) until at least the 18th century (1780 Inclosure award). Extensive work in Northamptonshire by David Hall (1993) suggest that the width of the strips may suggest a more precise date frame of the last time the strip was under plough. The strips at Clack Hill range from 5m to 12m apart. If the strip was straight and up to 13m wide, or very narrow then a post-medieval or post-enclosure date could be suggested. The classic S-shaped curves to the strips at Clack Hill would suggest a medieval date.

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